

1967

**CENSUS OF
MINERAL INDUSTRIES**

VOLUME I

**SUMMARY STATISTICS, AND
MAJOR GROUPS 10 - 14**

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CONTENTS

	Page
CHAPTER 1 General Summary	
Introduction	1
General Summary Tables	15
Appendix A: Explanation of Terms	A-1
Appendix B: Industry Descriptions	B-1
Appendix C: Authority for Census: Title 13, United States Code	C-1
Appendix D: Alphabetic Index of Products and Services of Mineral Establishments	D-1
Appendix E: Census Report Forms	E-1
CHAPTER 2 Water Use in Mining	2-1
3 Expenditures for Plant and Equipment	3-1
4 Size of Establishments	4-1
5 Type of Operation	5-1

Summary and Industry Statistics:

Metal Mining	10-1
Iron Ores	10A-1
Copper, Lead, Zinc, Gold, and Silver Ores	10B-1
Bauxite and Ferroalloy Ores, Except Vanadium	10C-1
Metal Mining Services and Miscellaneous Metal Ores	10D-1
Coal Mining	11-1
Anthracite Mining	11A-1
Bituminous Coal and Lignite Mining	12A-1
Oil and Gas Extraction	13-1
Crude Petroleum and Natural Gas	13A-1
Natural Gas Liquids	13B-1
Oil and Gas Field Services	13C-1
Nonmetallic Minerals (Except Fuels) Mining	14-1
Stone	14A-1
Sand and Gravel	14B-1
Clay, Ceramic, and Refractory Minerals	14C-1
Chemical and Fertilizer Mineral Mining	14D-1
Nonmetallic Minerals (Except Fuels) Services and Miscellaneous Nonmetallic Minerals	14E-1



1967 CENSUS OF Mineral Industries



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SUBJECT SERIES

General Summary

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
James T. Lynn, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

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Contents

page

Introduction	1
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TABLE 1 General Statistics: 1967 and Earlier Years	15
2 Detailed Statistics by Industry Group and Industry: 1967 and 1963	16
3 Selected Statistics by Geographic Areas: 1967 and 1963	20
4 Industry Shipments and Receipts and Net Shipments of Primary Products: 1967 . .	22
5 Employment at Central Administrative Offices and Related Facilities by Industry Groups and Industries: 1967 and 1963	24
6 Employment at Central Administrative Offices and Related Facilities by Divisions and Selected States: 1967 and 1963.	25
7 1967 Bureau of the Census and Bureau of Mines Statistics Compared	26

APPENDIX A Explanation of Terms	A-1
B Industry Descriptions	B-1
C Authority for Census: Title 13, United States Code	C-1
D Alphabetic Index of Products and Services of Mineral Establishments	D-1
E Census Report Forms	E-1



Introduction

I. GENERAL BACKGROUND

- 1. The Economic Censuses
- 2. Economic Significance of the Mining Sector
- 3. Role of the Census of Mineral Industries
- 4. Industry and Product Classification
- 5. Geographic Classification

II. METHODS

- 6. Planning and Preparation
- 7. Reporting Forms
- 8. The Mailing Lists
- 9. Geographic Area Coding
- 10. Data Collection

- 11. Data Processing
- 12. Coverage and Accuracy
- 13. Cooperation with Bureau of Mines

III. COMMENTS ON STATISTICAL MEASURES AND TABLES

- 14. Employment and Payrolls in Administrative Offices and Auxiliary Establishments
- 15. Materials
- 16. Value of Shipments by Multiunit Companies
- 17. Value Added by Mining
- 18. Capital Expenditures
- 19. Subject Reports
- 20. Confidentiality
- 21. Abbreviations

I. GENERAL BACKGROUND

1. THE ECONOMIC CENSUSES

General.—The economic censuses provide a comprehensive statistical profile of a large segment of the national economy. In 1967, these censuses accounted for nearly 70 percent of the \$555 billion of national income originating in the private sector. The principal industry groups not covered were finance, insurance, and real estate; agriculture and forestry; communications; and electric, gas, and sanitary services.

Uses and Users of Census Data.—The economic censuses are the primary source of facts about the structure and functioning of the economy and therefore provide information essential both for government and business. They furnish an important part of the framework for such composite measures as the national accounts. The census measures also provide weights and serve as benchmarks for current surveys of industrial activity and for indexes of industrial production, productivity, and price, all of which are essential in developing the general background for understanding particular economic situations.

There is widespread use of the economic censuses by manufacturers, mining companies, and distributors who need to establish measures of their potential markets in terms of areas, kinds of business, and kinds of products; and by management in various industries and trades which needs facts for purposes of economic or sales forecasting, for analysis of sales performance, for the layout of sales territories, for the allocation of advertising budgets, and for the location of plants, warehouses, and stores. For these business purposes, census facts are invaluable. Likewise, trade and professional associations need census information to learn how their industry is changing; chambers of commerce need to know how their community is changing. State and local governments need to understand the business structure and changes occurring in their areas. Business magazines rely on census facts as background for many of their articles.

Following every census, reports are purchased by thousands of business and other users; likewise, census facts are widely disseminated by trade associations, business journals, and the daily press; census volumes are available in all the major public and college libraries.

History.—The first statistical survey which can be called an economic census covered the year 1809, when inquiries on manufacturing were included with the 1810 census of population. Although the results of this pioneer effort were unsatisfactory by modern standards,¹ continued interest in measurement of the Nation's economic progress led to successive improvements during the 19th century. By 1890, the statistical standards and procedures followed in conducting the censuses were of a fully professional quality.

All of the decennial censuses from 1810 through 1940, with the exception of 1830, included questions on manufacturing. Inquiries on mining first appeared in 1840, and censuses of mineral industries were conducted decennially through 1940. Although some business-related data were collected in 1840, the first census of business was taken for the year 1929. This included retail trade, wholesale trade, and construction; selected service trades were covered beginning with 1933. Dates of these and other economic censuses from 1809 are shown in table A.

Enterprise Statistics.—The coordinated collection and tabulation of comparable data for several sectors beginning with 1954 has permitted the Census Bureau to develop its enterprise statistics program, which relates census company-level data to the establishment data. Thus, a measurement of the integration and diversification of the American enterprise system becomes available. Also, through the enterprise statistics program, it has become possible to link census establishment-based data on a modified basis to other statistical systems such as the Internal Revenue Service's "Statistics of Income" for corporations.

Legal Provisions.—Title 13 of the United States Code specifies the frequency of the censuses, the kinds of activities to be covered, the obligation to report, the penalties for failure to report, and the confidentiality of returns. It also authorizes the use of sampling techniques in conducting censuses. As amended in 1964, Title 13 requires the economic censuses to be taken at

¹For an appraisal of early censuses of manufacturing, see Meyer H. Fishbein, *The Censuses of Manufactures 1810-1890*. National Archives Publication No. 63-22, June 1963. Government Printing Office.

TABLE A. Years Covered by U.S. Economic Censuses: 1809 to 1967

Year covered	Manufactures	Minerals	Fisheries	Construction	Retail and wholesale trade	Selected services	Transportation
1809.....	x	-	-	-	-	-	-
1819.....	x	-	-	-	-	-	-
1839.....	x	-	-	-	-	-	-
1840.....	-	x	-	-	-	-	-
1849.....	x	-	-	-	-	-	-
1850.....	-	x	-	-	-	-	-
1859.....	x	-	-	-	-	-	-
1860.....	-	x	-	-	-	-	-
1869.....	x	-	-	-	-	-	-
1870.....	-	x	-	-	-	-	-
1879.....	x	-	-	-	-	-	-
1880.....	-	x	x	-	-	-	-
1889.....	x	x	x	-	-	-	-
1899.....	x	-	-	-	-	-	-
1902.....	-	x	-	-	-	-	-
1904.....	x	-	-	-	-	-	-
1908.....	-	-	x	-	-	-	-
1909.....	x	x	-	-	-	-	-
1914.....	x	-	-	-	-	-	-
1919.....	x	x	-	-	-	-	-
1921.....	x	-	-	-	-	-	-
1923.....	x	-	-	-	-	-	-
1925.....	x	-	-	-	-	-	-
1927.....	x	-	-	-	-	-	-
1929.....	x	x	-	x	x	-	-
1931.....	x	-	-	-	-	-	-
1933.....	x	-	-	-	x	-	-
1935.....	x	x	-	x	x	x	-
1937.....	x	-	-	-	-	-	-
1939.....	x	x	-	x	x	x	-
1947.....	x	-	-	-	-	-	-
1948.....	-	-	-	-	x	x	-
1954.....	x	x	-	-	x	x	-
1958.....	x	x	-	-	x	x	-
1963.....	x	x	x	-	x	x	x
1967.....	x	x	x	x	x	x	x

5-year intervals, covering the years ending in "2" and "7." The next censuses will cover the year 1972. The pertinent portions of Title 13 are quoted in appendix C.

2. ECONOMIC SIGNIFICANCE OF THE MINING SECTOR

The mineral industries in recent years have accounted for less than 2 percent of national income and have required employment of less than 2 percent of all gainful workers in the United States. Nevertheless, the mineral industries furnished an increasing proportion of the raw materials base of the economy. In 1966, the mining industries supplied 35.5 percent of all raw materials produced; agricultural materials, 58 percent; forest products, 5.5 percent; and fishery and wildlife products, 1 percent. This may be compared with averages for the first decade of this century when mineral products accounted for only 17 percent of all raw materials. Table B compares such figures for four periods in the last half century.

TABLE B. Percent Distribution of Raw Materials Production for Selected Periods: 1900 to 1964

Raw materials group	1900-09 average	1920-29 average	1950-59 average	1960-66 average
All raw materials...	100	100	100	100
Minerals.....	17	26	33	34
Agricultural materials	67	62	60	60
Forest products.....	15	10	6	5
Fishery and wildlife products.....	1	1	1	1

Source: U.S. Bureau of the Census and Bureau of Mines, Raw Materials in the United States Economy: 1900-1966 (Working Paper No. 30).

Mineral production in the United States requires relatively larger capital expenditures than does manufacturing production. Although value added in mining in 1967 amounted to only 6.9 percent of total value added for mining and manufacturing combined, capital expenditures in the mineral industries were 15.3 percent of the total for mining and manufacturing (see table C). Moreover, the oil and gas extraction industries alone accounted for 11.3 percent of all capital expenditures for mining and manufacturing. In comparing figures in table C, it should be noted that value added in mining includes a measure of value added in the development of mineral properties (see section 17) and capital expenditures include expenditures for development of mineral properties (see section 18).

TABLE C. Value Added, Employment, and Capital Expenditures in Mineral and Manufacturing Industries: 1967

Item	Value added (million dollars)	Capital expenditures (million dollars)	Employment (1,000)
Mineral industries:			
All mining.....	19,330.2	4,057.8	567.3
Oil and gas ex- traction only....	13,394.3	3,004.6	244.9
Manufacturing in- dustries.....	261,983.8	22,469.9	19,322.9
Mineral industries as percent of mineral and manu- facturing indus- tries:			
All mining.....	6.9	15.3	2.9
Oil and gas ex- traction only....	4.8	11.3	1.2

3. ROLE OF THE CENSUS OF MINERAL INDUSTRIES

In the farm-oriented economy of the 19th century, mining statistics played a relatively small role in government policy formation. The only sources of information on the mining sector were the censuses of mineral industries, then taken at 10-year intervals. Today, the need for mining statistics has greatly increased, and the user finds a vast array of detailed information covering virtually every measurable aspect of industrial activity including employment, payrolls, hours worked, production, prices, inventories, orders, investment in structures, machinery, and equipment, and consumption of raw materials, fuels, and water. Many of these statistics are available at frequent intervals and on a timely basis. Sophisticated indicators of economic progress have also been developed such as price and production indexes, gross national product, and national income, published at monthly or quarterly intervals.

In this setting, the census of mineral industries still plays an essential role since no other source provides such comprehensive and detailed information on the structure of the industrial sector. In effect, the census obtains, for every mining establishment with one employee or more, data on its input of labor, materials, and capital, its output of products and services, and its location. These facts are obtained in sufficient detail to permit classification by industry, by size of plant and, where desirable, by type of operation, kind of equipment, relationship to other plants of the same firm, and other characteristics.

General statistics (that is, total employment, payroll, production-worker employment, man-hours, wages, cost of materials, value of shipments, inventories, capital expenditures, and value added by mining) from the census of mineral industries are published by industry, by area, and by employment size of establishment. Information is supplied on the detailed industrial characteristics of each State and overall measures of mining activity are shown at the county level.

The census of mineral industries is a benchmark for updating indicators of economic activity. It provides very important information on the mining segment used in the national income accounts. Census data on materials consumed and product output are basic to the mining sector of the input-output studies of the Office of Business Economics. The information derived from the census of mineral industries is also used to develop indexes of industrial production for census years. These indexes are used as benchmarks for the monthly Federal Reserve Board index of industrial production—a key indicator of current economic activity.

4. INDUSTRY AND PRODUCT CLASSIFICATION

Structure of the Standard Industrial Classification.—The basic classification system employed in the economic censuses is the Standard Industrial Classification (SIC). The SIC was developed for use in the classification of establishments by type of activity in which engaged. It covers the entire field of economic activities, subdivided as follows:

Industrial division		Major groups
A	Agriculture, forestry, and fisheries	01-09
B	Mining	10-14
C	Contract construction	15-17
D	Manufacturing	19-39
E	Transportation, communication, electric, gas, and sanitary services	40-49
F	Wholesale and retail trade	50-59
G	Finance, insurance, and real estate	60-67
H	Services	70-89
I	Government	91-94
J	Nonclassifiable establishments	99

Below the major group level, the SIC provides for 3-digit groups and finally for 4-digit industries. To illustrate—

Division B.—Mining

Major Group 10	Metal mining
Industry group 104	Gold and silver ores
Industry 1044	Silver ores

The SIC is the responsibility of an intragovernmental technical committee headed by the Office of Management and Budget (formerly Bureau of the Budget). The system is used by all Federal Government agencies engaged in the classification of establishments. To facilitate comparison with Federal statistics and the filing of reports, many State and local governments and business concerns organize their own records along SIC lines.

The first SIC manual was issued in 1939. For the mining sector, the nucleus of the manual was the census of mineral industries industry classifications developed over a period of many years.²

²For the mining industries, a revised manual was issued in 1945. For the 1954 census, the 1945 classification structure was employed, with minor modifications. Minor revisions of the SIC between 1958 and 1967 introduced some 4-digit industry changes but none of them crossed 3-digit group lines. Another extensive revision of the SIC, now under way, is scheduled to be effective with 1972.

Structure of the SIC Mining Division.—For the mining division, the 5 2-digit SIC Major Groups (10 to 14) are subdivided into 20 3-digit SIC Groups (101 to 149) and into 53 4-digit industries (1011 to 1499).

Most of the 53 mineral industries are defined in terms of a specific group of related products. In determining the boundaries of product-defined industries, it is essential that each industry comprise a group of establishments whose output of products defining the industry (primary products) accounts for a relatively high proportion of the total shipments of the industry as well as of the total shipments of these primary products by establishments in all manufacturing industries.

No general-purpose system of industrial classification can hope to satisfy all users of census data. Some business users will be interested primarily in data relating only to themselves and to their competitors in the production of a narrow range of products; others will wish data relating to all products, including complementary and substitutable products, competing in a particular market; others may wish data relating to the consumers of one or more types of materials. Some may be interested only in the data for plants producing a specific product; others only for those plants producing a "full line" of products. The large number of SIC industries provides the analyst with the "building blocks" for obtaining useful approximations, if not "clean" data, relevant to many of these problems. But, at best, a single general-purpose system of classification can only partially satisfy these diverse needs; a point is soon reached beyond which the adaptation of a system to serve one use somewhat better will reduce its ability, often disproportionately, to serve an alternative use.

Subindustries.—To increase the usefulness or improve the editing of the data, the Census Bureau has further classified the basic 4-digit SIC industries into "subindustries." This device is employed where there are wide disparities in the operating ratios of the establishments in the industry because the establishment is operated as a mine only, a mine with treatment plant, a treatment plant only, or the operated mine was underground, open pit, or a combination. This technique was used for all mining industries for editing purposes and many were regarded as significant enough to be used for publication: For example, the crude petroleum and natural gas industry (SIC 1311) is subdivided into a crude petroleum subindustry and a natural gas subindustry.

Definition of Mining.—The mineral industries include all establishments primarily engaged in mining. This term is used in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is also used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation and beneficiating needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

Mineral preparation plants are usually operated together with mines or quarries and frequently no separate records for them are maintained. All such preparation plants are included in the scope of the minerals census. In general, separately operated preparation plants, whether they process minerals for the account of the operator or on a custom or toll basis for others, are also included in the minerals census. Coal cleaning and sizing plants operated at mines or as separate establishments are also included. However, crushing, grinding, and other treatment of certain nonmetallic minerals at separately operated plants is included in the manufacturing industries.

Contract hauling (except out of open pits in conjunction with mining) is excluded from the mineral industries.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mix concrete plants) are not within the scope of this census. However, certain information on these operations has been obtained in the census of manufactures and is included in some of the summary and industry reports and in the State reports. Wherever such inclusion occurs, it is clearly specified.

All blast furnaces; metal smelters; metal and petroleum refineries; plants manufacturing cement, brick, tile, and pottery; and plants engaged in dressing or polishing stone are classified in the manufacturing industries. Separate reports were obtained and included in the minerals census for the few ore-dressing plants operated in conjunction with smelters and for the few natural gas liquids recovery plants operated as parts of chemical establishments.

Establishment Basis of Reporting.—The SIC is an establishment classification system, and the census of mineral industries is conducted on an establishment basis. That is, a company operating establishments at more than one location is required to submit a report for each location; also, a company engaged in distinctly different lines of activity at one location is required to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed exploration work for oil or gas, or performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

Coverage of Establishments.—The 1967 Census of Mineral Industries excludes all single-unit establishments without paid employees and certain noncommercial operations. In the 1963, 1958, and 1954 censuses, establishments without paid employees were excluded if any of the following three items amounted to less than \$500 for the entire year: (1) Value of products shipped and services performed for others; (2) expenses for wages, salaries, supplies, minerals received for preparation, fuel, purchased electric energy, contract work, and purchased machinery, and (3) capital expenditures for development and exploration of mineral

properties, new construction and major alterations, and new and used machinery and equipment.

For 1939 and 1929, in general, small establishments were excluded if each of three similar items amounted to less than \$2,500, and for 1919, if value of products was less than \$500 and expenditures for development work less than \$5,000. For bituminous coal and lignite, an output criteria of 1,000 tons was used in these three censuses. For 1939, common sand and gravel operations were excluded if they produced less than 15,000 tons of sand and gravel and had expenses of less than \$15,000. For 1929 common sand and gravel establishments producing less than 25,000 tons were excluded. This industry was not covered in censuses prior to 1929. Minimums for size of establishments included were not provided for earlier censuses.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway contractors and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and mills where all of the ore is transferred to a company-owned smelter.

Cumulative percentages for number of establishments, value added in mining, and capital expenditures by employment size classes are shown in table D.

In general, it is believed that the 1967 minerals census reports provided essentially complete coverage of production and development operations. About 95 percent of the total shipments of oil, and probably about 95 percent of the total shipments of gas were covered. This may be compared with an indicated 98 percent coverage in the 1963 census and an indicated 97 percent, respectively, in the 1958 minerals census. The special problems faced in covering this industry and details on the apparent coverage attained are discussed in the special text for Crude Petroleum and Natural Gas. Undercoverage of the crude petroleum and natural gas industry appears to have reduced the overall minerals census coverage of value of shipments by only about 2.8 percent. However, this undercoverage is somewhat more significant for certain States.

TABLE D. Cumulative Percentages by Employment Size Class For Number of Establishments, Value Added in Mining, and Capital Expenditures: 1967

Employee size class	Number of mining es- tablishments	Value added by mining	Capital expendi- tures
All establishments	100.0	100.0	100.0
0 to 4 employees.....	51.4	5.2	9.8
5 to 9 employees.....	14.7	4.1	5.0
10 to 19 employees.....	14.0	7.3	7.6
20 to 49 employees.....	12.4	17.2	17.5
50 to 99 employees.....	3.8	12.1	11.6
100 to 249 employees....	2.5	21.3	20.0
250 to 499 employees....	0.8	18.9	15.3
500 to 999 employees....	0.3	8.3	8.1
1,000 to 2,499 employees	0.1	5.6	5.1
2,500 employees and over			

In the 1967 census, for the first time, reports were not obtained directly from all such establishments. Approximately 10,000 small manufacturing firms were excused from filing reports; under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration (SSA) and the Internal Revenue Service (IRS) were made available to the Census Bureau for use in the 1967 economic censuses. Estimates for data other than payrolls and sales for these small establishments were constructed from historical industry ratios. The effect on industry aggregates is slight in most industries; for mining as a whole, they account for less than 1 percent of the value added.

As indicated above, report forms were not mailed to 10,000 very small establishments. These establishments were assigned the industry classifications to which they had been coded in the 1963 Census of Mineral Industries, or if they had begun in business after 1963, on the basis of brief descriptions of the general activity of the establishment as reported to the Social Security Administration. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between mining and nonmining activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

Primary and Secondary Products.—As applied in the economic censuses, the SIC coding system operates in such a way that the definitions become progressively narrower with successive additions of numerical digits. At one extreme are the 5 very broad 2-digit groups and at the other about 225 individual 7-digit products. In between are approximately 20 3-digit groups, 52 4-digit industries, and 100 5-digit product classes. The 7-digit products and 5-digit product classes are considered the primary products of the industry with the same first four digits as the product code. Accordingly, an establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. The industry code assigned to the establishment is derived from a summation of values for 7-digit product codes to their 4-digit industry and the selection of the largest such value as the establishment's industry classification. However as mentioned earlier, the industry classification of an establishment may be determined not only by the products it makes but also by the processes employed or materials used in making those products.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. Therefore, the general statistics (employment, payrolls, inventories, value added by mining, total value of shipments, capital expenditures, etc.) shown for an industry (tables 1 to 4 of the industry chapters) reflect not only the primary activities of the establishments in that industry but also their activities of a secondary nature. The product statistics in table 6 of the industry chapters represent the total output of specific products whether they are produced by establishments classified in the same industry as the product or not. For this reason, in relating the industry statistics in the industry chapters, especially the industry total value of shipments (tables 1 to 4), to the product statistics (table 6), the composition of the industry's output as shown in table 5 should be considered.

TABLE E. Value Added in Mining by Region, Divisions, and States: 1967

Region, division, and State	Amount (million dollars)	Percent	Region, division, and State	Amount (million dollars)	Percent
United States total.....	19,330.2	100.0	South Region--Continued		
Northeast Region.....	842.5	4.4	South Atlantic Division--Con.		
New England Division.....	51.4	0.3	Virginia.....	178.5	0.9
Maine.....	3.0	0.0	West Virginia.....	744.4	3.9
New Hampshire.....	3.3	0.0	North Carolina.....	46.7	0.2
Vermont.....	11.7	0.0	South Carolina.....	21.5	0.1
Massachusetts.....	17.0	0.1	Georgia.....	106.4	0.5
Rhode Island.....	3.3	0.0	Florida.....	202.3	1.0
Connecticut.....	13.1	0.1	East South Central Division.	859.9	4.4
Middle Atlantic Division....	791.1	4.1	Kentucky.....	403.0	2.1
New York.....	137.5	0.7	Tennessee.....	116.2	0.6
New Jersey.....	50.6	0.3	Alabama.....	151.1	0.8
Pennsylvania.....	603.0	3.1	Mississippi.....	189.6	1.0
North Central Region.....	2,349.8	12.2	West South Central Division.	10,089.0	52.2
East North Central Division.	1,212.2	6.3	Arkansas.....	129.7	0.7
Ohio.....	281.4	1.5	Louisiana.....	3,983.3	20.6
Indiana.....	134.6	0.7	Oklahoma.....	985.1	5.1
Illinois.....	468.5	2.4	Texas.....	4,990.9	25.8
Michigan.....	289.9	1.5	West Region.....	3,853.9	19.9
Wisconsin.....	37.8	0.2	Mountain.....	2,234.6	11.6
West North Central Division.	1,137.6	5.9	Montana.....	129.2	0.7
Minnesota.....	415.0	2.1	Idaho.....	48.1	0.2
Iowa.....	43.6	0.2	Wyoming.....	501.8	2.6
Missouri.....	103.6	0.5	Colorado.....	251.4	1.3
North Dakota.....	76.9	0.4	New Mexico.....	718.8	3.7
South Dakota.....	23.6	0.1	Arizona.....	296.7	1.5
Nebraska.....	43.1	0.2	Utah.....	233.7	1.2
Kansas.....	431.8	2.2	Nevada.....	54.9	0.3
South Region.....	12,284.0	63.5	Pacific division.....	1,619.3	8.4
South Atlantic Division.....	1,335.1	6.9	Washington.....	21.3	0.1
Delaware.....	35.3	0.2	Oregon.....	27.3	0.1
Maryland.....			California.....	1,342.2	6.9
District of Columbia.....			Alaska.....	223.5	1.2
			Hawaii.....	5.0	0.0

The Classification of Products and Materials.—In census industrial statistics, a commodity classification system based on the SIC is employed. The code numbers used in this system relate the commodity to the industry in which it is produced. For example, the 7-digit product code number 1021105 refers to crude copper ore mined from open pit operations. The first five digits of this code number, 10211, refer to the "product class" crude copper-bearing ores, and the first four digits, 1021, refer to the industry in which these products are made (the copper ores industry). The system is also applied to the coding of materials insofar as the first four digits are concerned; for example, the code number 102100 refers to copper ores, concentrates and precipitates used as a material at a manufacturing plant, and the first four digits of this code number, 1021, refer to the mining industry, where this product originates.

This SIC-based system is simpler than other systems for the coding of industrial products and materials used, since there is a direct numerical relationship between commodities and industries.

The SIC-based commodity classification is used in the Census Bureau's entire industrial statistics program, including monthly, quarterly, and annual surveys on manufacturing activity, and also in the census of wholesale trade. The Bureau also publishes data on imports and exports in terms of SIC-based categories as well as the traditional Schedule B and TSUSA systems.³

5. GEOGRAPHIC CLASSIFICATION

Census Divisions and Regions.—In order to present census data at a level intermediate between the U.S. total and those for the individual 50 States and the District of Columbia, the Census Bureau has used regional groupings for over a century. Since the 1909 census, the present nine geographic divisions have been used. Beginning with the 1939 census, the nine divisions were also classified into four geographic regions: Northeast, South, North Central, and West.

³Schedule B is the U.S. export classification while TSUSA is applied to imports.

Not only are these groupings convenient for the summary presentation of census data below the U.S. level, but they are also essential to presenting a maximum of geographic information where the individual State data cannot be shown without disclosing figures for individual companies. (See section 20, "Confidentiality".)

The relative importance of mining among the regions, divisions, and States is shown in table E.

Districts.—In 1963 for the first time, the census of mineral industries provided information by districts within States for the oil and gas extraction industries. This was done in that census for the States of Texas, New Mexico, and Louisiana. In 1967, information for the oil and gas extraction industries was also provided on a district basis for California. In 1963, offshore operations in the crude petroleum and natural gas industry (SIC 1311) were reported with the adjacent onshore district; in 1967, these offshore operations were reported separately.

II. METHODS

6. PLANNING AND PREPARATION

General.—The Census Bureau has an obligation to meet public needs for timely and reliable information while holding costs and the burden on respondents to a minimum. During the planning stages of the 1967 economic censuses, the advice of trade and professional associations, Federal and State government agencies, individual companies, labor unions, and research and educational organizations was solicited in an effort to reach both the users of data and the respondents who supply the basic figures. Simultaneously, studies of the problems encountered in the 1963 censuses were undertaken, and proposals to improve the methods of collection, processing, and tabulation were explored.

A Major Processing Innovation.—Beginning with the 1954 economic censuses, the basic mailing lists have been obtained from Internal Revenue Service (IRS) and Social Security Administration (SSA) records.⁴ These records were also sampled to develop statistics for retail and service establishments with no employees. After the 1963 censuses, it was decided to investigate the feasibility of making greater use of the data in the IRS-SSA records. This effort led, in the 1967 censuses, to the exemption of over 2 million firms from the filing requirement, including 10,000 small mining firms. Instead, census-type statistics for this group were developed from IRS-SSA records. Well in advance of the data collection phase of the censuses, plans for using these records for small employers were developed in close cooperation with those agencies. Specific procedures for this use and for assuring confidential treatment of individual tax returns were set forth in Executive Order No. 10911, dated January 17, 1961, and Treasury Decision No. 6547 of the same date. The basic records used were business income tax returns (IRS forms 1040C, 1065, 1120, and 1120S) and payroll tax returns (IRS form 941). The information obtained from these reports was the name and address, payrolls, and gross business receipts. In addition, an SIC industrial activity code was assigned by use of the permanent SSA records which indicate the industry or kind of business of each employer. Other census statistics for these small firms were imputed, using industry average ratios to payrolls and sales.⁵

Planning the Content of Questionnaires.—As in previous censuses, the content of the 1967 questionnaires was developed in consultation with a large number of organizations and individuals, representing both the mineral concerns who supply the

basic data and users of the resulting statistics. Those consulted included government agencies, individual firms, labor unions, the American Statistical Association, the American Economic Association, the American Marketing Association, and all mining associations covering specific industries.

A special effort was made to obtain the advice of individual mining companies and their trade associations as to the content of the sections of the report forms dealing with the output of specific products. Drafts of the proposed 1967 product sections were circulated among 50 trade associations and about 300 mining companies, both large and small. These inquiries followed the pattern of the 1963 census inquiries, with the introduction of new product detail reflecting suggestions received by the Census Bureau after the 1963 canvass. Small items (those valued at \$2.5 million or less) were not retained in the list unless they were needed to simplify the classification of other products or were of strategic importance. The manufacturers and others consulted in this clearance procedure were requested to comment particularly as to whether the proposed detail was readily reportable from business records, and whether it represented the most appropriate set of items for the industry. A restriction was placed on proposals for additional detail; it was stipulated that the 1967 value of any new product category should exceed \$7.5 million.

The thousands of comments and suggestions received in this clearance procedure were analyzed by the census staff. Finally, a detailed account of the review procedure and the decisions reached was forwarded to the Office of Statistical Standards, Bureau of the Budget, along with the Census Bureau's recommendations for the content of the product sections.

The final review of the content was performed by the Office of Statistical Standards with the assistance of the Advisory Council on Federal Reports. The latter organization is a group of business executives representing a cross section of industries and various professions within companies such as controllers, economists, and market research directors.

7. REPORTING FORMS

A representative selection of the reporting forms used in the 1967 census is reproduced in appendix E. The uses of each of them are discussed below.

General Forms.—This group of forms was used in the economic censuses generally, either as companywide reports or as reports for establishments whose classification was not known precisely in advance of mailing.

⁴The 1947 Census of Manufactures list was also obtained from the SSA.

⁵As discussed elsewhere in this introduction, the amount of imputation introduced by this procedure was only about 1 percent of the overall totals.

NC-X1A, Report of Company Organization.—This companywide report and its companion form **NC-X1B** were used in the precavass of multiunit companies conducted in 1967. A more detailed account of their use is given in section 8, "The Mailing Lists."

NC-X3, General Schedule.—This questionnaire was designed to obtain information from small companies for which the industry code available in the SSA records was not precise enough to indicate which one of the standard census questionnaires should be mailed. The information provided on form **NC-X3** was used to classify these companies by industry and tabulate their data in the appropriate census.⁶

NC-X6, Central Administrative Office or Auxiliary Establishment.—Many multiunit companies maintain separate establishments to provide centralized administrative, management, or other supporting services for other establishments of the same company, but not for the general public or other companies. These establishments were asked to complete form **NC-X6**. The form contained questions on approximate employment for such functions as centralized administration, research and development, warehousing, and other auxiliary activities, and on the cost of research and development work performed by these nonmanufacturing establishments.

NC-K1, Company Summary Report.—Each multiunit company with 250 employees or more received a form **NC-K1**, Company Summary Report, along with the appropriate questionnaires for its establishments. The **NC-K1** requested consolidated company totals for key data items, such as receipts, new capital expenditures, inventories, and fixed assets. In addition, each company was asked to distribute the 1967 employment reported on its establishment questionnaires by its IRS-SSA employer identification numbers (EI numbers) and to compare these totals to the figures reported on its Treasury Form 941 tax returns. This comparison provided assurance that all domestic establishments of each large multiunit firm and its subsidiaries would be included in the censuses. Form **NC-K1** served this operational purpose and also provided essential data for the enterprise statistics program described above in section 1, "The Economic Censuses."

NC-K13, Company Exploration Expenditures and Assets for Oil and Gas Field Operations.—This questionnaire was designed to obtain detailed information on company exploration expenditures and assets for oil and gas field operations on a net working interest basis. By contrast, figures reported on form **MC-13A** for oil and gas operations represent data reported on a company operated basis and include data for properties operated both for own account and for other but exclude data for properties owned by one company but operated by others. All multiunit companies with more than 20 employees in group 131 Crude Petroleum and Natural Gas, or with more than 50 employees in group 138, Oil and Gas Field Services, as well as a 5 to 10 percent sample (varying with the geographic area) of smaller multiunit companies were canvassed. In addition, all single-unit companies with more than 10 employees in major group 131, Crude Petroleum and Natural Gas, or with more than 15 employees in major group 138, Oil and Gas Field Services, as well as a 5 to 10 percent sample (varying with the geographic area) of smaller single-unit companies were covered on form **MC-13A**.

A more detailed description of the questionnaire and definition of terms used is given in the introduction to industry chapter 13A, Crude Petroleum and Natural Gas. The data

tabulated from this questionnaire is also presented in table 8A and B of that release.

Census of Mineral Industries Forms and Instruction Manuals.—The questionnaire and instruction manual reproduced in the appendix, form **MC-13A**, is typical of the 10 forms used for operating mining establishments. Each of these forms was designed to be used for a specific group of industries. The inquiries on the 10 forms were identical except for the detailed questions on products shipped, materials used, and miscellaneous topics such as operations performed, equipment used, and delivery of products.

8. THE MAILING LISTS

General.—As discussed in section 6, "Planning and Preparation," the basic lists for 1967 were obtained from IRS-SSA records. Since the IRS-SSA lists consist essentially of the names and addresses of companies rather than establishments,⁷ however, it was necessary to follow separate procedures for multiunit companies (those operating at more than one location).

The Precavass.—Multiunit companies were required to file at least one establishment report⁸ covering each location. In order to select the appropriate questionnaires, it was necessary to determine in advance the nature of operations at each location. Beginning early in 1967, therefore, a "Report of Company Organization" (form **NC-X1A**)⁹ was obtained from firms known to be multiunits from previous census records. A shorter questionnaire, form **NC-X1B**,⁹ was also sent to other firms which were regarded as possible multiunits, including all mining companies with 250 employees or more who were not on the **NC-X1A** list.

Both of these forms consisted essentially of a report on company affiliation and a list of the domestic establishments operated by the company. Before the forms were mailed, the company's establishments as identified in census records were prelisted. In the instructions for form **NC-X1A**, the respondents were asked to make any necessary corrections to this list. In addition, they were asked to supply descriptions of any new establishments not already listed, including their approximate size.

Approximately 700 large multiunit companies were segregated for special handling in the precavass because problems involving overlap and duplication were anticipated. Many of these companies were active in manufacturing, retail, and wholesale trade as well as in mining. The instructions for the precavass were reviewed with these firms in personal discussions with officials of their accounting departments, in order to make certain that the procedure was understood and the establishments properly described on form **NC-X1A**.

Initial Control File.—This file, consisting of about 7 million names and addresses of companies, was assembled from IRS-SSA records and other sources including the 1963 economic census records.

⁷The SSA records for multiunit companies identify "reporting units," which in many instances correspond to census establishments. The differences are such, however, that it was found necessary to obtain up-to-date lists of establishments as described in this section. Also, the Census Bureau concept of a company differs from the IRS-SSA definition, since the Census company includes all establishments under common ownership or control; in the IRS-SSA records, subsidiary corporations are often treated as independent companies.

⁸If two or more distinct lines of activity were carried on at one location, separate reports were obtained under some circumstances. (For a complete discussion, see "Establishment Basis of Reporting" in section 4, above.)

⁹This form is reproduced in appendix E.

⁶The use of Form **NC-X3** is also discussed in section 8, "The Mailing Lists."

Single-Unit Companies.—The mailing lists for single-unit companies (those operating at only one location) were developed from the initial control file by removing out-of-scope companies (those whose activities were not to be surveyed in the economic censuses) and those identified as multiunits in the prec canvass. A special survey of out-of-scope companies with more than 50 employees in selected industries was conducted to doublecheck their eligibility, and some names were added to the mailing list as a result.

The final step was to set aside the records of the small companies for which census-type statistics were to be developed from administrative records. The remaining records constituted the mailing lists for single-unit companies.

General Schedule.—While the lists assembled in these ways were generally adequate in providing sufficient industry information to determine the proper form for mailing, a number of the records did not have precise industry information associated with them. Form NC-X3, "General Schedule," which is reproduced in appendix E, was mailed to all such companies. Since it was assumed that these companies were quite small, only a few key figures were requested. On the basis of the information reported, these reports were coded and included in the basic tabulations. If form NC-X3 indicated that the company was actually large, it was later requested to file one or more of the appropriate standard questionnaires.

9. GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required in order to tabulate the census data by counties. As in previous censuses, the post office address and ZIP code of the establishment were not always accepted as defining the physical location, but respondents were required to describe the actual location in terms of street address, city, town or village, county, and State. For establishments located in rural territory, the name or number of the nearest highway was requested and the distance from the nearest town or other urban place.

In censuses prior to 1963, clerks assigned geographic code numbers to each establishment based on the description furnished by the respondent. This process was slow and required careful verification. Beginning with 1963, a computerized system was developed which assigned an area code number and a prefix symbol to the mailing address before the questionnaires were mailed. The prefix symbol indicated whether or not the mailing address was clearly acceptable as describing the physical location. If there was any question about its acceptability, the respondent's description was later carefully reviewed after the questionnaire was received. The assignment of tentative code numbers by the computer was based on extensive reference files containing nearly a million business names and addresses.

The geographic coding system used in the 1967 economic censuses was based on the 1963 system with some improvements and revisions. The major changes included expanding the address reference file, and use of the ZIP code as part of the procedure for matching addresses against the reference file.

10. DATA COLLECTION

General.—Although the greater use of administrative records in 1967 substantially reduced the number of companies canvassed directly, there remained nearly 2 million which were required to file. The assembly of several hundred different questionnaires

into mailing packages, correctly labeled and coded, combined with the correct instruction booklets, was an extensive operation.

Instructions.—Several general instruction booklets were prepared to assist respondents in completing questionnaires for the 1967 economic censuses. In addition, separate detailed instruction manuals were printed for establishments in a few kinds of business and in certain mineral industries with peculiar reporting problems, as well as for manufacturing establishments reporting on the detailed standard forms.

Timing.—The bulk of the 1967 questionnaires was mailed in mid-February 1968 with a due date of April 30, about 2 months later than the corresponding due date for the 1963 censuses. Adoption of the April 30 due date, which had been urged by accountants, was based on the assumption that reports would be filed more promptly if their preparation followed that of Federal income tax returns, which were due April 15, and that the "lost" 2 months would be gained back. This turned out not to be the case. The collection phase was not completed until early November 1968, about 2 months behind the 1963 record.

Followup.—Companies which did not return their questionnaires by the due date had to be reminded that their returns were overdue. A reminder card was used for the first followup, and form letters used in the five subsequent mailings. Two basic letter formats were used, one for multiunit companies that had returned questionnaires for some but not all establishments, and the other for companies that had not responded at all.

The last followup letter was mailed in October 1968. Estimates based on data from administrative records were included in the census tabulations for the relatively small number which had not responded by the closeout date in November 1968. Thus, all companies and establishments included in the original mailing list (except those determined to be inactive during 1967) were represented in the final statistical results, either by actual returns or by proxy returns generated from administrative records. A special effort was made to obtain actual returns from all large firms, so that the volume of business represented by proxy returns was relatively very small.

11. DATA PROCESSING

General.—The editing,¹⁰ coding, and tabulation of data for the 5 million establishments represented in the 1967 economic censuses was a complicated task requiring extensive advance planning and careful coordination among the Census Bureau's organization subdivisions. Automatic data processing and other advanced techniques were used in all phases to a considerable extent.

Facilities.—In the mail collection phase, the questionnaires were returned by respondents to the Census office at Jeffersonville, Ind., where most noncomputer (that is, clerical) processing operations were performed. The Jeffersonville functions consisted mainly of preliminary screening of questionnaires, carrying on routine correspondence with respondents, punching cards, and transmitting the punched data to Washington on a high speed transmission system. The Washington staff handled computer operations, and all operations in connection with the use of IRS and SSA records.

¹⁰In data processing, the term "editing" means the review of information collected on questionnaires or from other sources, with the objective of locating and correcting erroneous entries.

Preliminary Screening.—After checking in against control lists and assigning geographic codes, the questionnaires were reviewed clerically to see that they conformed to certain minimum requirements before further processing. In the case of multiunit companies, the sum of employment and payrolls reported on its establishment questionnaires was compared with the control totals reported on form NC-K1, "Company Summary Report." Questionnaires received from ostensibly single-unit firms were reviewed to ascertain whether they had become multiunits through merger or acquisition. All questionnaires were reviewed to see that the entries were legible and punchable, and that entries appeared for a number of key items. For mining establishment returns, the key items were payrolls and value of shipments. Questions arising in the screening operation were resolved by writing or telephoning the respondents. Complex problems involving multiunit companies were either handled by a special task force of experienced analysts in Jeffersonville or were referred to the Washington office.

Computer Editing.—All of the establishment records from the 1967 censuses of mineral industries and manufactures underwent computerized processes of screening and detailed testing of data. While most of these programs were newly devised in 1967, they were largely based on similar programs in use during the 1963 censuses. As in 1963, average values and tolerance limits for key operating ratios (for example, cost of materials per dollar of shipments, payroll per employee, production-worker wages per man-hour, etc.) played a fundamental role in the editing process. However, more extensive testing and more sophisticated routines for adjusting data which failed the tests were incorporated into the 1967 programs. The need for computer editing may be judged by the fact that more than half of all 4-digit SIC industries had one or more data cells changed by more than 5 percent as a result of application of these programs.

In sequence, the computer programs used included a Housekeeping and Screening Edit, a Coverage Control and Matching Edit, a Magnitude Edit, a General Statistics Edit, an Intercard Intercolumn Edit, a Product and Materials Edit, a Duplicate Removal Program, and various programs of referral and of aggregate testing. These programs are described in outline form below. Also included within this sequence were programs of geographic coding and of industry coding, which are described elsewhere in this introduction.

The Housekeeping and Screening Edit was designed to inspect each record for the presence of basic information such as identification numbers, geographic codes, and source codes (that is, ASM, census of manufactures, or census of minerals). This program also included some simple data adjustments, such as the replacement of a missing total by a corresponding sum of detail.

The Coverage Control and Matching Edits were a system of programs which checked the consistency of clerically assigned coverage codes with reported information on the ownership status of the establishment. For mining establishments, the program included matching with the 1963 census record file to identify corresponding prior-year records. In the 1967 Census of Mineral Industries, nearly 30,000 establishments were initially defined as being within the scope of mining. Of this number, approximately 2,000 were identified as having no activity during 1967. Of the remainder, more than 500 were rejected from the combined output of the Housekeeping and Screening Edit and from the Coverage Control and Matching Edit. This latter number was clerically reviewed, corrected where necessary, and recycled back into the computer.

The Magnitude Edit was designed to test the size of two key items, payrolls and value of shipments. For mining establishments, payrolls were compared to a historical employment-size

code. Payroll figures passing the test were then used, in conjunction with cost of materials, in testing the value of shipments.

When failures in the magnitude tests were encountered, a fixed sequence of attempts to adjust the data was performed, which included dividing a reported figure by 1,000 (a common error was the reporting of values in dollars rather than in thousands of dollars as requested), or replacing a total by a sum of detail where these differed. If the corrective procedures of the Magnitude Edit were unsuccessful, the schedule was rejected for clerical inspection, correction where necessary, and recycling. This occurred for about 1,400 establishments.

The General Statistics Edit tested key operating ratios and adjusted the record or flagged it for later attention if it failed the test. Fifty-three such ratios were assigned for use in testing census of mineral industries records, and 31 1963-67 ratios of change were used in testing year-to-year changes. The tolerance limits and average values for these 84 ratios were based on the limits used for the corresponding tests in the 1963 census.

In the presence of ratio failures, the computer program was designed to determine the component of the ratio which was most likely to have caused the failure. This was done by a process of inspecting other ratios containing each of the suspect components, and by computing an overall weighted-reliability index for each. The component with the lowest reliability index was judged to be incorrect. The computer then attempted to adjust the questionable figure by a process of "rounding" (multiplying or dividing by successive powers of 10), substitution of a total by a sum of detail, or by imputation based on one of the several ratios in which the suspect component was contained. After each such attempted adjustment, the new figure was accepted if it resulted in an improved reliability index.

In addition to testing and correction of reported information, the General Statistics Edit was the vehicle for the imputation of data for the 10,000 companies designated as administrative-record cases, as well as data for companies which failed to report in the mail canvass. Imputation for all reasons, failure to report as well as administrative records, accounted overall for about 3 percent of the total value of shipments. Records were not rejected and removed from the computer tapes in the General Statistics Edit, but were flagged and printed out for review by an analyst whenever the computer made a large adjustment, found a large year-to-year change, or could not make an acceptable adjustment after test failure. Excluding administrative records, about 4,200 such cases were printed out for review and possible correction.

The Intercard Intercolumn Edit was designed to test specific relationships among products, materials, and special inquiries. The record was flagged for inspection if the test failed; some 3,000 records were printed out for review from this edit.

The Product and Materials Edits were performed after the data on products and materials had been extracted from the basic establishment records, and assembled in product (or material) sequence. The edits were designed to inspect the reported quantities of production and of consumption after the corresponding values were tested and found acceptable. Unit values, in terms of dollar value per unit of quantity, were computed and ranked from highest to lowest. The most extreme values were removed, and the truncated data were used in the formulation of parameters (average deviation, central value, and upper and lower tolerance limits) which were printed out for review by analysts. This routine differs from those in other edits in that the parameters for editing were developed from the data at hand rather than from historic data or predetermined reasonableness limits.

The Duplicate Removal program was designed to identify and eliminate duplicate establishment records from the census. The sources of duplication were many; imputed records which were followed by the late receipts of a report from the respondent were typical. The program resulted in the elimination of nearly 500 duplicate establishment records from the census file.

As in the 1963 census, this preliminary round of computer editing and professional correction was followed by a more detailed review of establishment records.

12. COVERAGE AND ACCURACY

Since the list of companies obtained from IRS and SSA records was considered to be complete, no field coverage check was conducted. The prec canvass and other special procedures for multiunit companies described in section 8, "The Mailing Lists,"

and section 10, "Data Collection," were designed to secure complete lists of establishments, thereby amplifying the IRS-SSA company list. Control totals in terms of employment and payrolls of multiunit companies were also used to verify the completeness of establishment coverage. This procedure is discussed in section 11, "Data Processing."

13. COOPERATION WITH BUREAU OF MINES

The Bureau of Mines, U.S. Department of the Interior, cooperated with the Bureau of the Census in conducting the 1967 Census of Mineral Industries. The purpose of this cooperation was to assure comparable coverage and unduplicated results. Further, the Bureau of Mines played an important role in the development of the report forms and also cooperated in the development of a comparison of the basic commodity statistics tabulated by the two agencies. This data is shown in table 7 of this chapter.

III. COMMENTS ON STATISTICAL MEASURES AND TABLES

(Explanations and definitions of the various measures of activity for which statistics are compiled in the census of mineral industries are presented in appendix A. In the following sections, the limitations and other characteristics of some of these measures are discussed, the content of the statistical tables is described, and comparisons with other statistical series are presented.)

14. EMPLOYMENT AND PAYROLLS IN ADMINISTRATIVE OFFICES AND AUXILIARY ESTABLISHMENTS

Employment, payrolls, and establishment counts of central administrative offices and auxiliary establishments are included in all tables of the census of mineral industries. Tables 5 and 6 of this chapter show employment and payroll data separately by industries and States.

15. MATERIALS

In addition to the total cost of materials which every establishment was requested to report, quantity and cost information was collected for approximately 50 specific materials.¹¹ Materials were generally collected only in those industries in which they were important inputs. Detailed consumption information was collected in the standard materials inquiry, in the product inquiries (for items which were produced and consumed in the same plant), or in a few instances in special inquiries. The resulting statistics are presented mainly in tables 6 and 7 of the industry chapters.

In using the detailed data on materials consumed which appear in table 7 in the industry chapters, the following limitations should be noted:

- (1) Attention should be paid to the code 976000 captioned "Undistributed supplies used, etc., and purchased machinery installed." The amounts appearing on these lines represent imputed totals for establishments whose statistics were developed by use of administrative

records, and totals for other establishments which failed to report their consumption in specific terms. Thus, for most industries, the specific categories are understated. A judgment on the statistical significance of the understatement for each industry may be made on the basis of the relationship of the value shown for the "undistributed" (code 976000) line compared with the total of materials, components, parts, containers, and supplies for the industry.

- (2) Establishments consuming less than a specified amount of material were not requested to report consumption of the material separately. For the majority of individual materials, the minimum amount was \$5,000. The use of this cutoff is not believed to have had a significant effect on the totals.
- (3) Materials were reported for the establishment as a whole and no attempt was made to ascertain how much of the material was used in each of various products. Thus, the industry totals represent consumption in secondary products as well as primary products of the industry represented. The extent of secondary production is measured by the specialization and coverage ratios shown in table 5 of the industry chapters.

16. VALUE OF SHIPMENTS BY MULTIUNIT COMPANIES

General.—Respondents were instructed to report net selling values, f.o.b. mine, well, or plant, after discounts and allowances and excluding freight charges and excise taxes. Multiunit companies were instructed to report for each establishment as if it were a separate economic unit and, in particular, to report inter-plant transfers at their full economic value, including not only the cost of production but also a reasonable proportion of company overhead and profits. Since there is no advertising or other selling cost involved, it would be expected that the value per unit of such transfers would be less than that for commercial sales. The plant receiving the transferred goods was instructed to include them in its cost of materials, valued as at the shipping point plus the cost of freight and other handling charges.

¹¹See 1967 Censuses of Manufactures and Mineral Industries, *List of Materials Consumption Items*, MC67-6, for a more detailed account of the collection of data on materials consumed.

Individual Products.—In the 1967 census program, information was collected on the output of approximately 225 individual product items.¹² The term "product" as used in the census of mineral industries represents the finest level of detail for which output information was requested. Consequently, it is not necessarily synonymous with the term product as used in the marketing sense. In some cases it may be more detailed but more often it is more aggregative. Frequently, large aggregative values at the products level indicated that detailed production figures were available from the Bureau of Mines statistical program.

Typically, both quantity and value of shipments information was collected. However, if there was no meaningful physical quantity measure that could be reported by manufacturers, only value of shipments was collected. For products which are used to a large degree within the same establishment as materials or components in the fabrication of other products, total quantities produced and often the quantities consumed within the plant were collected. Typically, the information on production was also collected for products for which there are significant differences between total production and shipments in a given year.

Classes of Products.—For the purpose of summarizing the product information, the separate products were aggregated into classes of products which were, in turn, grouped into all primary products of each industry. The code structure used is a 7-digit number for the individual product, a 5-digit code for the class of product, and a 4-digit code for the total primary products in an industry (see section 4 for application of coding structure to the assignment of SIC codes for establishments).

The 200 product items in the 1967 census (including products from the Current Industrial Reports program) were grouped into approximately 100 separate product classes. Products were grouped into product classes to bring out significant differences in the broad types of products within a 4-digit industry.

17. VALUE ADDED IN MINING

This measure is computed by subtracting the cost of supplies, minerals received from other establishments for preparation, purchased fuels and electric energy, contract work, and purchased machinery installed from the value of shipments and receipts and capital expenditures. This statistic avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments and receipts," used in this calculation, includes the shipments of all products of the mining establishment, together with receipts for work done for others. "Capital expenditures" includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The "costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

¹²See 1967 Census of Mineral Industries, MIC67-3, *Numerical List of Mineral Products*, and MIC67-4, *Alphabetic List of Mineral Products*.

Value added in mining differs from "national income originating in mining," as presented in the national income estimates compiled by the Office of Business Economics, Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production. It excludes, in addition to cost of materials, such costs as depreciation charges, State and local taxes (other than corporate income taxes), allowance for bad debts, and purchases of services from other economic sectors, such as contract services classified in other sectors, services of engineering and management consultants, advertising, telephone and telegraph expenses, insurance, royalties, etc. It is, therefore, a more "net" concept for value added in mineral production than that used in the minerals census. On the other hand, the OBE figures do not include a measure of value added in development of mineral properties.

18. CAPITAL EXPENDITURES

Under this heading, mining establishments were instructed to report expenditures of the type chargeable to fixed assets accounts, for which depreciation reserves are normally maintained. Actual capital outlays during the year were requested, not the final value of equipment put in place or structures completed during the year. Included in such expenditure totals are expenditures for development and exploration of mineral properties. Excluded are cost of maintenance and repair charged to current operating expense, and cost of land and mineral rights.

The Census Bureau estimates of capital expenditures tend to be lower than those published in the joint Office of Business Economics-Securities and Exchange Commission survey. The major source of difference is to be found in the scope of the two series. Census data relate only to mining establishments, whereas the OBE-SEC series covers all establishments of mining companies—nonmining as well as mining. This factor is particularly important in the petroleum industry where company expenditures for developing new wells and new distribution facilities are ordinarily much larger than their capital expenditures at refineries. On the other hand, mining establishments of companies engaged primarily in nonmining activities are excluded from the OBE-SEC series but included in Census figures.

19. SUBJECT REPORTS

The subject reports include tables representing summaries of rearrangements of data appearing in the industry and area reports. The following reports are included in the subject series:

General Summary.—This report provides summary tabulations of data presented in greater detail in other census tables.

Water Use in Mining.—This report presents results of a survey of 1968 consumption of water in establishments consuming 20 million gallons or more annually. A more detailed description of data and definitions of terms employed is given in the introduction to the report.

Expenditures for Plant and Equipment.—These tables summarize the expenditures data published in table 3 of the industry reports. A description of the data is given in appendix A and in section 18, "Capital Expenditures."

Size of Establishments.—This report provides a summary of the general statistics by size of establishment which appear in table 4 of the industry reports.

Type of Operation.—These tables summarize the type-of-operation data published in tables 2A and 3B of the industry reports and table 3 of the State reports.

20. CONFIDENTIALITY

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because (1) it was considered preferable to show regional data for an industry, even at the cost of withholding data for another (usually the least significant) State in a region, rather than to show all publishable data for the individual States and group the disclosure States throughout the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) by giving preference to industry-group statistics over individual industries within each State, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

21. ABBREVIATIONS

The following abbreviations and symbols occur frequently in text, tables, and footnotes:

—	Zero
X	Not applicable
NA	Not available
n.e.c.	Not elsewhere classified
n.s.k.	Not specified by kind
lin.	Linear
equiv.	Equivalent
kw.-hrs.	Kilowatt-hours
D	Withheld to avoid disclosing figures for individual companies
SIC	Standard Industrial Classification
IRS	Internal Revenue Service
SSA	Social Security Administration
OBE	Office of Business Economics
SEC	Securities and Exchange Commission

Other abbreviations, such as lb., gal., yd., doz., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 pounds; where the figures are expressed in tons of 2,240 pounds, the unit of measure is specified as "long tons" or "gross tons."



TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Kind of operation and year	Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies etc., and purchased machinery installed (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Capital expenditures (million dollars)
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
Mineral industries only:											
1967.....	² 28,579	5,682	567.3	4,186.8	432.6	892.0	2,888.2	19,330.2	10,576.2	(NA)	4,057.8
1963.....	² 38,651	5,499	615.6	3,742.5	481.5	973.0	2,679.5	15,910.0	8,974.0	18,804.4	3,263.6
1958.....	36,392	6,045	733.9	3,749.0	565.4	1,080.5	2,623.0	13,385.2	7,521.0	16,373.1	2,804.1
1954.....	37,641	6,204	787.1	3,394.8	648.3	1,251.9	2,579.7	³ 11,558.7	⁴ 6,099.4	³ 14,226.2	2,726.2
Including operations in manufactures:											
All operations:											
1967.....	29,688	5,871	583.3	4,274.5	447.7	922.2	2,969.4	19,621.4	10,647.0	(NA)	⁵ 4,061.0
1963.....	40,532	5,743	637.0	3,843.0	501.7	1,013.8	2,773.2	16,231.3	9,066.3	19,210.5	⁵ 3,267.6
1958.....	37,966	6,295	754.9	3,835.6	585.2	1,119.5	2,702.5	13,685.4	7,585.1	16,729.0	⁵ 2,806.6
1954 ⁵	38,858	6,466	807.4	3,466.1	667.8	1,291.5	2,646.8	³ 11,752.3	⁴ 6,148.7	³ 14,465.3	⁵ 2,728.1
1939 ⁶	⁷ 25,023	(NA)	856.4	1,174.8	774.1	1,287.9	970.5	2,679.8	(NA)	3,432.8	(NA)
1919 ⁸	22,348	(NA)	1,065.5	1,461.3	989.8	(NA)	1,309.5	2,364.7	(NA)	3,138.4	(NA)
1909 ⁸	25,692	(NA)	1,005.8	637.1	960.5	(NA)	582.2	939.1	(NA)	1,215.0	(NA)
1902 ⁹	⁷ 52,088	(NA)	621.8	416.8	¹⁰ 582.0	(NA)	376.2	628.4	(NA)	772.6	(NA)
1889.....	(NA)	(NA)	542.6	227.1	(NA)	(NA)	(NA)	334.0	(NA)	426.3	(NA)
1880.....	(NA)	(NA)	296.0	94.8	(NA)	(NA)	(NA)	216.8	(NA)	252.0	(NA)
Excluding oil and gas extraction industries:											
1967.....	13,330	3,190	338.4	2,419.4	280.5	575.7	1,878.0	6,227.1	3,580.8	(NA)	⁵ 1,056.4
1963.....	19,290	3,026	365.5	2,098.3	309.8	616.5	1,680.1	5,211.5	3,021.1	6,787.1	⁵ 715.9
1958.....	19,444	3,603	442.0	2,134.9	371.2	679.2	1,691.2	4,652.9	2,785.7	6,071.9	⁵ 612.6
1954 ⁵	21,267	3,698	491.6	2,003.2	432.3	799.7	1,670.0	¹¹ 14,078.6	2,250.4	¹¹ 5,235.3	⁵ 499.9
1939 ⁶	⁷ 13,794	(NA)	670.2	856.4	625.1	1,022.8	750.1	1,437.4	(NA)	1,773.0	(NA)
1929 ¹²	10,996	(NA)	865.6	1,238.9	812.2	(NA)	1,099.9	1,955.8	(NA)	2,392.8	(NA)
1919 ⁸	12,377	(NA)	953.9	1,292.0	896.1	(NA)	1,174.1	1,779.7	(NA)	2,235.5	(NA)
1909 ⁸	17,494	(NA)	987.1	626.9	946.8	(NA)	578.0	848.2	(NA)	1,050.5	(NA)
1902 ⁹	⁷ 20,352	(NA)	594.3	395.5	¹⁰ 559.5	(NA)	359.8	569.3	(NA)	670.3	(NA)
1889.....	21,807	(NA)	513.4	216.8	(NA)	(NA)	(NA)	318.7	(NA)	388.3	(NA)
1880.....	7,395	(NA)	284.5	87.6	(NA)	(NA)	(NA)	199.1	(NA)	227.4	(NA)

Note: For more detailed historical statistics, see table 1 of the General Summary report of the 1954 Census of Mineral Industries, Vol. I. For all years prior to 1939, excludes contract service operations.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

¹For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment in making manufactured products.

²In 1967, for the first time data for single unit establishments without paid employees were excluded from the Census. In 1963, there were 6,543 single unit establishments without paid employees in the United States. In the 1963 Census establishments without paid employees for mining as a whole accounted for approximately 3 percent of value added.

³Excludes data for the Uranium-Radium-Vanadium Ores Industry.

⁴Excludes the cost of natural gas processed at natural gas liquids plants, but includes the estimated value prior to processing of liquids contained in such gas. See also footnote 3.

⁵Excludes data for sand and gravel mining operations in manufacturing establishments.

⁶Except for value of shipments and value added, excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was \$7,913 thousand; this value has been included in the value of shipments and value added in mining.

⁷Represents number of mines and quarries, number of natural gas liquids plants, number of crude petroleum and natural gas establishments, and for mining services industries, number of operating companies.

⁸Excludes data for sand and gravel operations and for stone quarries operated as parts of cement and lime plants. In 1929, there were 957 such sand and gravel establishments, with products valued at \$102,312 thousand, and 252 such stone quarries, with products valued at \$31,032 thousand.

⁹Includes data for lime plants producing lime valued at \$9,336 thousand. Excludes data for sand, gravel, common clay, and shale mining operations and for stone quarries at cement plants.

¹⁰Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

¹¹Includes data for oil and gas extraction operations in Alaska. See also footnote 3.

¹²Excludes data for common clay and shale operations. In 1939, there were 609 such mines with products valued at \$6,341 thousand.

TABLE 2. Detailed Statistics by Industry Group and Industry: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry group and industry	1967											
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses			
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies, purchases for resale, and purchased fuels and electric energy	Materials received for preparation	Contract work	Purchased machinery installed
	All mineral operations....	28,579	5,682	567.3	4,186.8	432.6	892.0	2,888.2	19,330.2	(NA)	(NA)	(NA)	(NA)
	Metal mining.....	1,155	318	70.9	552.4	55.4	113.9	396.1	1,556.6	(NA)	(NA)	(NA)	(NA)
1011	Iron ores.....	146	79	22.6	185.9	18.0	36.2	133.4	661.9	221.2	91.9	37.2	49.9
1021	Copper ores.....	156	62	20.9	170.9	15.0	32.5	114.6	436.5	252.2	(1)	27.9	81.5
1031	Lead and zinc ores.....	167	57	9.1	60.9	7.4	15.0	46.2	102.6	(NA)	(NA)	(NA)	(NA)
	Lead ores subindustry.....	104	22	4.2	30.6	3.3	6.7	21.9	36.9	244.5	(2)	18.4	(2)
	Zinc ores subindustry.....	63	35	4.9	30.3	4.1	8.3	24.3	65.7	227.0	(2)	2.4	(2)
104	Gold and silver ores.....	183	15	3.7	25.5	3.2	6.9	20.2	51.3	(NA)	(NA)	(NA)	(NA)
1042	Lode gold.....	77	6	2.4	16.2	2.0	4.6	12.9	33.3	8.9	-	.3	1.3
1043	Placer gold.....	48	2	.2	1.1	.2	.4	.9	2.1	2.7	(2)	(2)	(2)
1044	Silver ores.....	58	7	1.2	8.2	1.0	1.9	6.4	16.0	3.9	-	.4	.8
1051	Bauxite and other aluminum ores	17	7	.6	4.1	.5	.8	2.9	22.5	5.7	(1)	.6	.4
106	Ferroalloy ores, except vanadium	43	11	4.0	31.9	3.1	6.2	23.0	73.4	(NA)	(NA)	(NA)	(NA)
1062	Manganese ores.....	20	4	.2	.8	.1	.2	.6	1.8	22.4	(2)	.1	(2)
1064	Tungsten ores.....	23	7	3.8	31.1	3.0	6.0	22.5	71.7	240.6	(2)	4.4	(2)
1069	Ferroalloy ores, n.e.c.												
1081	Metal mining services.....	148	34	2.6	19.1	2.4	4.5	16.3	33.6	14.1	-	1.4	1.7
109	Miscellaneous metal ores.....	295	53	7.4	54.1	5.8	11.8	39.5	174.8	(NA)	(NA)	(NA)	(NA)
1092	Mercury ores.....	62	9	.7	4.7	.6	1.2	3.8	8.3	(D)	(D)	(D)	(D)
1093	Titanium ores.....	7	6	.9	6.4	.7	1.4	4.9	17.3	5.4	-	.7	1.4
1094	Uranium-radium-vanadium ores..	188	34	5.4	40.5	4.1	8.5	28.9	142.1	38.5	35.6	26.8	15.7
1099	Metallic ores, n.e.c.	38	4	.3	2.4	.3	.6	2.0	7.1	(D)	(D)	(D)	(D)
11	Anthracite mining.....	403	69	7.2	41.1	6.3	11.6	35.0	82.1	(NA)	(NA)	(NA)	(NA)
1111	Anthracite.....	371	58	6.4	36.6	5.5	10.3	30.9	74.7	12.3	43.7	6.1	2.2
1112	Anthracite mining services.....	32	11	.8	4.5	.7	1.3	4.1	7.4	2.0	-	.2	.8
12	Bituminous coal and lignite mining.....	4,081	1,055	124.4	926.2	108.9	212.4	776.8	2,009.2	(NA)	(NA)	93.4	308.5
1211	Bituminous coal.....	3,921	1,030	122.5	912.5	107.2	208.8	764.7	1,974.6	578.1	303.2	92.7	303.2
1212	Lignite.....	45	7	.5	3.3	.4	.8	2.6	12.9	(D)	(D)	.1	3.2
1213	Bituminous and lignite mining services, n.e.c.	115	18	1.4	10.4	1.3	2.8	9.5	21.7	8.1	-	.6	2.1
13	Oil and gas extraction.....	16,358	2,681	244.9	1,855.1	167.2	346.5	1,091.4	13,394.3	3,511.3	2,742.7	1,645.6	766.7
131	Crude petroleum and natural gas.	8,796	1,034	126.4	1,049.1	66.2	130.0	440.3	10,965.0	1,298.5	-	1,519.8	490.0
	Crude petroleum subindustry...	7,278	856	106.8	901.7	54.9	107.7	365.6	8,943.0	1,083.7	-	1,286.3	401.8
	Natural gas subindustry.....	1,518	178	19.6	147.4	11.2	22.3	74.7	2,022.1	214.7	-	233.6	88.2
1321	Natural gas liquids.....	684	216	12.4	99.5	10.5	21.0	82.1	905.0	123.0	2,742.7	47.2	104.0
138	Oil and gas field services.....	6,878	1,431	106.1	706.6	90.6	195.5	569.0	1,524.1	2,089.8	-	78.6	172.7
1381	Drilling oil and gas wells....	2,347	581	42.9	294.7	38.7	81.4	255.2	627.4	268.0	-	51.6	87.1
1382	Oil and gas exploration services.....	636	99	8.4	53.1	6.6	15.9	39.4	126.4	24.3	-	4.8	16.4
1389	Oil and gas field services, n.e.c.	3,895	751	54.8	358.7	45.3	98.2	274.4	770.4	1,797.5	-	22.1	69.2
14	Nonmetallic minerals, except fuels.....	6,582	1,559	119.9	812.0	94.8	207.6	588.9	2,288.0	(NA)	(NA)	(NA)	(NA)
1411	Dimension stone.....	244	21	1.9	9.3	1.8	3.4	7.6	18.1	(NA)	(NA)	.4	.7
	Dimension limestone subindustry.....	46	6	.5	2.7	.5	.9	2.2	5.4	1.3	(2)	.2	(2)
	Dimension granite subindustry	50	7	.6	3.6	.6	1.2	2.9	6.8	2.0	(2)	.1	(2)
	Dimension stone, n.e.c., subindustry.....	148	8	.8	3.0	.7	1.3	2.6	5.9	21.3	(2)	.2	(2)

See footnotes at end of table.

TABLE 2. Detailed Statistics by Industry Group and Industry: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group and industry	1967--Continued					1963				
		Value of shipments and receipts	Value of net shipments and receipts	Capital expenditures			All employees		Value added in mining	Value of shipments and receipts	Capital expenditures
				Total	Development and exploration of mineral property	New and used plant, equipment, and machinery	Number	Payroll			
(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	(million dollars)	(million dollars)	(million dollars)		
	All mineral operations.....	25,848.7	(NA)	4,057.8	1,501.1	2,556.7	615.6	3,742.5	15,910.0	21,620.5	3,263.6
	Metal mining.....	2,296.2	(NA)	339.8	55.1	284.7	77.2	515.2	1,418.2	2,128.2	230.9
1011	Iron ores.....	953.4	(D)	108.8	8.1	100.7	23.1	161.6	549.3	762.2	96.6
1021	Copper ores.....	675.9	561.5	122.1	20.4	101.8	26.5	187.3	417.1	670.2	87.1
1031	Lead and zinc ores.....	151.1	135.8	43.7	11.3	32.5	9.4	49.3	84.4	136.0	11.9
	Lead ores subindustry.....	65.5	53.4	34.2	7.7	26.6	4.3	21.9	34.0	50.7	6.1
	Zinc ores subindustry.....	85.6	82.4	9.5	3.6	5.9	5.1	27.4	50.3	85.2	5.8
104	Gold and silver ores.....	63.3	63.3	4.4	2.1	2.3	4.1	24.8	49.0	60.2	7.2
1042	Lode gold.....	42.3	42.3	1.5	.3	1.2	2.3	13.9	21.3	26.6	2.9
1043	Placer gold.....	2.5	2.5	.3	.1	.2	.4	2.1	5.8	7.5	1.0
1044	Silver ores.....	18.5	18.5	2.6	1.7	0.9	1.4	8.8	21.9	26.1	3.3
1051	Bauxite and other aluminum ores..	28.8	(D)	.4	(Z)	.4	.6	3.4	17.5	21.5	.3
106	Ferroalloy ores, except vanadium	108.3		12.7	1.0	11.6	3.0	20.3	66.4	90.7	5.8
1062	Manganese ores.....	4.0	(D)	.2	-	.2	.2	1.1	2.3	7.2	.4
1064	Tungsten ores.....	104.2	(D)	12.5	1.0	11.5	2.8	19.2	64.1	83.5	5.4
1069	Ferroalloy ores, n.e.c.....										
1081	Metal mining services.....	48.3	48.3	2.3	(Z)	2.3	2.2	13.9	24.7	32.4	3.0
109	Miscellaneous metal ores.....	267.1	(D)	45.4	12.2	33.2	8.2	54.4	209.7	355.1	19.0
1092	Mercury ores.....	10.6	10.6	(D)	(D)	(D)	.3	1.8	2.5	3.7	.3
1093	Titanium ores.....	23.5	23.5	1.3	(Z)	1.3	1.0	6.4	15.0	22.0	2.2
1094	Uranium-radium-vanadium ores..	218.2	182.6	40.5	11.9	28.6	6.7	45.2	190.6	326.4	15.9
1099	Metallic ores, n.e.c.	14.8	(D)	(D)	(D)	(D)	.2	1.0	1.6	3.0	.6
11	Anthracite mining.....	155.9	(NA)	6.4	.4	6.0	11.8	58.8	120.5	236.5	15.1
1111	Anthracite.....	146.0	102.0	5.0	.4	4.6	10.7	53.0	110.5	221.0	12.7
1112	Anthracite mining services.....	9.9	9.7	1.4	(Z)	1.4	1.1	5.8	10.0	15.5	2.5
12	Bituminous coal and lignite mining.....	2,944.7	(NA)	334.3	20.3	314.0	133.9	762.3	1,606.7	2,396.4	218.3
1211	Bituminous coal.....	2,897.5	2,580.7	329.5	20.3	309.2	132.0	752.5	1,578.1	2,358.3	210.8
1212	Lignite.....	17.9	17.9	1.5	(Z)	1.5	.5	2.8	11.8	14.1	4.6
1213	Bituminous and lignite services, n.e.c.	29.3	29.2	3.3	(Z)	3.3	1.3	7.0	16.8	24.0	2.9
13	Oil and gas extraction.....	17,455.9	(NA)	3,004.6	1,401.3	1,603.3	271.5	1,744.7	11,019.8	14,512.5	2,551.7
1311	Crude petroleum and natural gas	11,731.7	(NA)	2,541.6	1,372.4	1,169.3	145.2	1,016.4	9,016.4	9,893.8	2,209.9
	Crude petroleum subindustry...	9,648.7	(NA)	2,066.1	1,114.0	952.1	125.8	892.6	7,813.0	8,600.1	1,906.5
	Natural gas subindustry.....	2,082.9	(NA)	475.6	258.4	217.2	19.4	123.8	1,203.4	1,293.7	303.4
1321	Natural gas liquids.....	3,707.6	1,102.6	214.4	-	214.4	13.9	96.6	762.1	2,800.8	113.9
138	Oil and gas field services.....	2,016.7	1,985.3	248.4	28.9	219.6	112.3	631.7	1,241.3	1,817.9	227.9
1381	Drilling oil and gas wells....	893.7	892.7	140.4	26.5	113.9	55.4	318.2	653.3	979.3	148.0
1382	Oil and gas exploration services.....	152.0	147.6	19.9	.3	19.6	8.7	47.8	90.0	119.8	11.7
1389	Oil and gas field services, n.e.c.	971.0	945.0	88.2	2.1	86.1	48.2	265.7	498.0	718.8	68.2
14	Nonmetallic minerals, except fuels.....	2,996.0	(NA)	372.7	23.9	348.4	121.2	661.5	1,744.8	2,346.9	247.5
1411	Dimension stone.....	22.2	22.1	1.1	(Z)	1.1	2.2	7.8	14.8	19.7	1.1
	Dimension limestone subindustry.....	6.5	6.5	.4	(Z)	.4	.3	1.3	2.9	3.5	.3
	Dimension granite subindustry	8.7	8.7	.2	(Z)	.2	.8	3.6	6.5	9.4	.4
	Dimension stone, n.e.c., subindustry.....	7.0	7.0	.4	(Z)	.4	1.0	3.0	5.4	6.8	.4

See footnotes at end of table.

TABLE 2. Detailed Statistics by Industry Group and Industry: 1967 and 1963 —Continued

(See appendix, Explanation of Terms)

Code	Industry group and industry	1967											
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses			
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies, purchases for resale, and purchased fuels and electric energy	Materials received for preparation	Contract work	Purchased machinery installed
14	Nonmetallic minerals, except fuels--Continued												
142	Crushed and broken stone.....	2,033	714	42.9	280.8	35.8	80.7	215.6	704.7	235.1	13.1	33.3	86.9
1422	Crushed and broken limestone..	1,484	510	30.8	197.5	25.8	58.5	153.6	492.2	160.6	9.2	22.4	60.9
1423	Crushed and broken granite....	149	80	4.5	27.1	3.9	8.9	22.0	80.1	30.9	.7	2.9	12.6
1429	Crushed and broken stone, n.e.c.	400	124	7.7	56.2	6.1	13.3	40.1	132.4	43.6	3.2	8.0	13.4
144	Sand and gravel.....	3,232	485	34.6	229.1	28.0	59.9	173.9	547.5	(NA)	(NA)	(NA)	(NA)
1442	Construction sand and gravel..	3,069	422	30.5	202.0	24.8	53.1	154.6	481.7	141.6	9.7	23.2	53.9
1446	Industrial sand.....	163	63	4.1	27.2	3.2	6.8	19.1	65.9	20.7	1.2	3.3	8.1
	Glass sand subindustry.....	41	27	1.7	11.3	1.3	2.9	7.9	27.1	² 12.1	(²)	1.0	(²)
	Molding sand subindustry....	71	18	1.1	7.6	.9	1.9	5.5	17.4	² 9.5	(²)	2.1	(²)
	Industrial sand, n.e.c., subindustry.....	51	18	1.3	8.2	1.0	2.1	5.8	21.4	² 8.4	(²)	.2	(²)
145	Clay and related minerals.....	356	121	9.4	57.7	7.5	16.7	42.9	154.6	(NA)	(NA)	(NA)	(NA)
1452	Bentonite.....	32	16	.9	5.4	.6	1.4	3.4	13.2	6.9	-	1.3	.6
1453	Fire clay.....	99	12	.8	5.1	.7	1.4	4.2	18.5	4.3	-	1.1	.8
1454	Fuller's earth.....	16	11	1.1	5.1	1.0	2.0	4.1	15.6	5.6	-	.9	4.5
1455	Kaolin and ball clay.....	63	34	3.7	24.1	2.9	6.4	16.7	65.1	21.7	.2	2.4	10.1
1456	Feldspar.....	17	9	.5	2.6	.4	.9	2.0	6.6	¹ 2.5	(¹)	.6	.3
1459	Clay and related minerals, n.e.c.	129	39	2.3	15.4	2.0	4.4	12.5	35.7	¹ 18.3	(¹)	1.0	4.6
147	Chemical and fertilizer minerals	233	130	23.8	188.2	15.9	34.5	113.5	740.7	(NA)	(NA)	(NA)	(NA)
1472	Barite.....	30	10	.9	4.7	.8	1.6	3.9	15.3	¹ 3.0	(¹)	1.5	1.1
1473	Fluorspar.....	32	9	.7	4.7	.6	1.3	3.7	11.0	5.4	3.4	0.4	0.5
1474	Potash, soda, and borate minerals.....	33	28	7.9	67.8	5.1	10.7	41.4	187.7	¹ 52.8	(¹)	1.6	16.6
1475	Phosphate rock.....	69	41	8.1	59.6	5.4	12.0	35.3	199.3	49.3	52.1	10.0	33.6
1476	Rock salt.....	26	18	2.6	19.3	1.9	4.4	13.0	70.9	¹ 11.5	(¹)	1.3	4.9
1477	Sulfur.....	31	21	3.2	30.5	1.8	4.0	15.1	253.2	¹ 25.6	(¹)	12.4	10.3
1479	Chemical and fertilizer mining, n.e.c.	12	3	.3	1.6	.2	.4	1.1	3.4	¹ 2.2	(¹)	.2	.5
1481	Nonmetallic minerals services...	106	10	.8	5.9	.8	1.5	4.9	11.2	3.7	-	.4	1.8
149	Miscellaneous nonmetallic minerals.....	378	78	6.5	41.0	5.0	10.9	30.5	111.2	(NA)	(NA)	(NA)	(NA)
1492	Gypsum.....	33	5	.4	2.3	.3	.7	1.9	7.4	¹ 1.9	(¹)	.2	.4
1493	Mica.....	20	5	.3	1.8	.3	.5	1.2	5.3	¹ 1.5	(¹)	.1	.3
1494	Native asphalt and bitumens...	12	7	.5	3.0	.4	.8	2.2	5.8	2.5	(¹)	.9	.3
1495	Pumice and pumicite.....	29	2	.2	1.0	.1	.2	.7	2.0	1.6	(¹)	.3	.1
1496	Talc, soapstone, and pyrophyllite.....	53	18	1.2	7.4	1.1	2.3	5.8	16.9	¹ 4.8	(¹)	.1	1.2
1497	Natural abrasives, except sand	20	5	.3	2.2	.2	.5	1.4	4.3	² 2.8	(²)	(Z)	(²)
1498	Peat.....	76	4	.5	2.3	.4	1.0	2.0	6.7	² 2.1	(²)	.2	(²)
1499	Nonmetallic minerals, n.e.c....	135	32	2.9	20.9	2.3	4.9	15.3	62.8	¹ 20.6	(¹)	5.5	4.7

Standard Notes: - Represents zero. (NA) Not available. (X) Not applicable. (Z) Less than one half of the unit of measure specified.

¹Data for minerals received for treatment are included with supplies, purchases for resales, and purchased fuels and electric energy.²Data for minerals received for treatment and purchased machinery installed are included with supplies, purchases for resale, and purchased fuels and electric energy.

TABLE 2. Detailed Statistics by Industry Group and Industry: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group and industry	1967--Continued					1963				
		Value of shipments and receipts	Value of net shipments and receipts	Capital expenditures			All employees		Value added in mining	Value of shipments and receipts	Capital expenditures
				Total	Development and exploration of mineral property	New and used plant, equipment, and machinery	Number	Payroll			
		(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
14	Nonmetallic minerals, except fuels--Continued										
142	Crushed and broken stone.....	963.6	852.4	109.5	2.8	106.6	43.2	229.1	581.7	794.9	82.7
1422	Crushed and broken limestone..	666.6	558.6	78.7	2.4	76.3	31.1	160.6	408.5	542.9	59.5
1423	Crushed and broken granite....	114.2	114.0	13.0	(Z)	12.9	4.0	19.8	61.7	89.7	7.2
1429	Crushed and broken stone, n.e.c.	182.7	179.8	17.8	.4	17.4	8.1	48.7	111.5	162.2	16.0
144	Sand and gravel.....	715.1	(NA)	94.4	3.6	90.6	40.1	212.2	513.7	678.1	75.7
1442	Construction sand and gravel..	625.4	615.7	84.7	3.6	81.0	36.4	190.4	459.3	607.5	69.0
1446	Industrial sand.....	89.6	88.4	9.6	(Z)	9.5	3.7	21.2	54.4	70.5	3.2
	Glass sand subindustry.....	36.4	36.4	3.9	(Z)	3.8	1.6	9.1	22.6	29.1	4.0
	Molding sand subindustry....	25.5	24.8	3.5	(Z)	3.5	.9	5.0	12.8	16.6	.9
	Industrial sand, n.e.c., subindustry.....	27.8	27.3	2.2	(Z)	2.2	1.2	7.1	19.0	24.8	1.9
145	Clay and related minerals.....	218.2	(NA)	24.0	.7	23.3	8.4	42.2	113.5	161.5	14.7
1452	Bentonite.....	21.2	(D)	.9	(Z)	.9	.8	4.1	11.4	18.1	1.4
1453	Fire clay.....	23.1	22.2	1.5	.3	1.2	1.0	4.6	12.6	17.1	2.2
1454	Fuller's earth.....	22.5	(D)	4.1	.2	3.8	.8	3.1	9.1	13.0	1.2
1455	Kaolin and ball clay.....	87.9	86.5	11.6	.2	11.4	3.3	17.7	49.8	66.1	5.2
1456	Feldspar.....	9.4	8.6	.5	(Z)	.5	.5	2.0	6.1	8.5	1.7
1459	Clay and related minerals, n.e.c.	54.1	51.1	5.5	.1	5.4	2.0	10.7	24.5	38.9	3.0
147	Chemical and fertilizer minerals	909.6	846.5	131.3	16.0	115.4	21.0	137.1	433.3	576.9	60.0
1472	Barite.....	19.6	19.6	1.2	(Z)	1.2	1.4	6.8	11.1	16.7	1.1
1473	Fluorspar.....	19.6	(D)	1.1	.1	.9	.8	4.0	8.9	15.8	.3
1474	Potash, soda, and borate minerals.....	215.7	(D)	43.0	10.9	32.1	7.1	51.9	156.2	192.1	26.8
1475	Phosphate rock.....	296.6	244.5	47.7	3.2	44.5	5.6	32.0	94.9	161.7	22.2
1476	Rock salt.....	81.3	(D)	7.3	.1	7.2	2.4	16.0	49.5	59.3	7.4
1477	Sulfur.....	271.2	271.2	30.3	1.7	28.7	2.6	20.6	100.3	113.1	1.1
1479	Chemical and fertilizer mining, n.e.c.	5.6	(D)	.7	-	.7	1.1	6.0	12.4	18.3	1.1
1481	Nonmetallic minerals services...	15.3	15.3	1.9	(Z)	1.9	.9	4.6	9.3	13.2	1.4
149	Miscellaneous nonmetallic minerals.....	152.1	151.5	10.5	.8	9.7	5.5	28.5	78.2	102.6	12.0
1492	Gypsum.....	9.3	9.3	.6	.1	.5	.5	2.4	7.8	10.2	1.3
1493	Mica.....	6.9	(D)	.5	(Z)	.4	.4	1.6	3.9	5.6	.9
1494	Native asphalt and bitumens...	8.7	8.7	.8	.3	.5	.4	2.2	6.3	8.5	1.1
1495	Pumice and pumicite.....	2.8	2.8	.2	(Z)	.2	.2	1.1	4.2	5.4	.7
1496	Talc, soapstone, and pyrophyllite.....	21.3	(D)	1.7	.2	1.5	1.3	6.6	13.7	17.5	1.1
1497	Natural abrasives, except sand.....	5.7	5.7	1.4	(Z)	1.4	.3	1.6	4.1	5.0	.5
1498	Peat.....	8.5	8.5	.5	(Z)	.5	.5	1.8	5.6	7.4	.9
1499	Nonmetallic minerals, n.e.c....	88.9	(D)	4.8	.2	4.6	1.9	11.2	32.6	43.0	5.5

TABLE 3. Selected Statistics by Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Geographic area	1967								
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)		
United States, total.....	28,579	5,682	567.3	4,186.8	432.6	892.0	2,888.2	19,330.2	10,576.2
Northeast Region.....	2,944	578	58.3	428.8	46.6	94.7	310.0	842.5	536.3
New England Division.....	298	54	4.0	28.3	2.9	6.3	18.3	51.4	24.8
Maine.....	34	4	.3	1.3	.2	.5	1.1	3.0	2.6
New Hampshire.....	26	3	.2	1.4	.2	.4	1.1	3.3	1.6
Vermont.....	36	12	.9	5.1	.7	1.6	4.1	11.7	3.9
Massachusetts.....	111	19	1.3	11.0	.9	1.9	5.9	17.0	9.7
Rhode Island.....	22	7	.3	2.1	.3	.6	1.7	3.3	2.1
Connecticut.....	69	9	.9	7.4	.6	1.3	4.4	13.1	4.9
Middle Atlantic Division.....	2,646	524	54.3	400.5	43.7	88.4	291.7	791.1	511.5
New York.....	467	87	9.1	81.7	5.9	12.6	43.0	137.5	53.7
New Jersey.....	138	45	2.9	22.1	2.1	4.6	13.6	50.6	25.9
Pennsylvania.....	2,041	392	42.3	296.7	35.7	71.2	235.1	603.0	431.9
North Central Region.....	5,812	993	100.5	733.8	79.7	166.3	540.4	2,349.8	1,371.3
East North Central Division..	3,349	608	59.6	455.3	47.6	100.5	339.2	1,212.2	679.7
Ohio.....	1,195	196	17.8	136.8	13.9	29.2	92.8	281.4	172.2
Indiana.....	497	88	6.5	46.7	5.2	10.9	35.5	134.6	52.0
Illinois.....	962	214	20.7	167.0	16.6	35.9	126.9	468.5	188.9
Michigan.....	459	85	12.2	88.0	10.1	20.5	71.3	289.9	246.6
Wisconsin.....	236	25	2.4	16.8	1.8	4.0	12.7	37.8	20.0
West North Central Division..	2,463	385	40.9	278.5	32.1	65.8	201.2	1,137.6	691.6
Minnesota.....	226	65	12.9	98.7	10.1	19.8	70.7	415.0	251.5
Iowa.....	240	42	2.8	18.2	2.4	5.7	14.2	43.6	24.8
Missouri.....	381	76	8.9	60.0	6.0	12.3	38.3	103.6	82.1
North Dakota.....	166	24	1.9	12.6	1.6	3.3	10.1	76.9	45.5
South Dakota.....	81	7	2.2	13.9	1.9	4.4	11.3	23.6	10.9
Nebraska.....	254	24	1.6	9.9	1.4	2.8	7.9	43.1	19.8
Kansas.....	1,115	147	10.6	65.2	8.7	17.5	48.7	431.8	257.0
South Region.....	15,072	3,173	300.1	2,152.6	226.0	464.4	1,439.5	12,284.0	6,461.4
South Atlantic Division.....	3,259	762	80.2	542.2	69.5	139.9	447.9	1,335.1	903.8
Delaware.....	153	33	2.2	14.7	1.8	4.0	10.2	35.3	21.9
Maryland.....	737	170	13.0	76.5	11.6	21.8	63.9	178.5	114.4
District of Columbia.....	1,780	341	45.6	337.7	40.4	78.2	288.6	744.4	482.8
Virginia.....	161	59	3.5	18.8	2.9	6.7	14.4	46.7	29.5
West Virginia.....	59	26	1.6	8.6	1.4	3.1	6.6	21.5	15.3
North Carolina.....	159	66	6.2	35.1	5.2	11.8	27.6	106.4	60.0
South Carolina.....	210	67	8.1	50.8	6.2	14.2	36.0	202.3	179.9
Georgia.....	2,220	510	43.7	277.8	38.5	75.6	228.5	859.9	518.1
Florida.....	1,267	259	24.6	157.1	22.0	42.1	132.6	403.0	307.2
East South Central Division..	352	99	6.9	39.1	6.0	12.4	31.6	116.2	54.1
Tennessee.....	294	83	7.9	51.6	7.1	13.8	44.0	151.1	66.1
Alabama.....	307	69	4.3	30.0	3.4	7.3	20.4	189.6	90.7
Mississippi.....	9,593	1,901	176.2	1,332.6	118.0	248.9	763.1	10,089.0	5,039.5
West South Central Division..	306	56	4.1	24.7	3.4	7.0	19.2	129.7	67.7
Arkansas.....	1,382	429	46.5	371.5	34.2	75.8	245.3	3,983.3	2,188.6
Louisiana.....	1,782	304	30.1	219.6	17.4	35.1	102.2	985.1	426.6
Oklahoma.....	6,123	1,112	95.5	716.8	63.0	131.0	396.4	4,990.9	2,356.6
Texas.....	4,751	938	108.4	871.6	80.3	166.6	598.3	3,853.9	2,207.2
West Region.....	2,830	536	68.0	521.3	52.5	108.9	375.5	2,234.6	1,323.3
Mountain Division.....	311	38	5.5	39.4	4.5	9.1	31.0	129.2	110.6
Montana.....	97	23	3.1	23.3	2.6	5.2	18.6	48.1	27.1
Idaho.....	447	99	8.7	64.8	6.8	14.3	47.2	501.8	214.5
Wyoming.....	648	95	12.0	94.6	8.4	16.4	57.2	251.4	134.5
Colorado.....	690	156	16.6	120.7	13.0	26.6	90.2	718.8	477.5
New Mexico.....	198	38	10.7	90.0	8.1	18.7	64.7	296.7	133.6
Arizona.....	308	66	8.5	65.7	6.7	13.4	48.3	233.7	178.1
Utah.....	131	21	2.9	22.8	2.4	5.2	18.3	54.9	47.4
Nevada.....	1,921	402	40.4	350.3	27.8	57.7	222.8	1,619.3	883.9
Pacific Division.....	185	17	1.6	12.6	1.2	2.3	8.8	21.3	15.0
Washington.....	160	18	1.4	9.5	1.2	2.4	8.2	27.3	13.5
Oregon.....	1,438	329	35.0	298.1	23.4	48.1	182.2	1,342.2	687.7
California.....	126	35	2.2	28.5	1.8	4.5	22.3	223.5	165.4
Alaska.....	12	3	.2	1.6	.2	.4	1.3	5.0	2.3
Hawaii.....									

(Z) Less than \$50 thousand or 50 employees.

TABLE 3. Selected Statistics by Geographic Areas: 1967 and 1963 —Continued

(See appendix, Explanation of Terms)

Geographic area	1967—Continued				1963				
	Value of shipments and receipts (million dollars)	Capital expenditures			All employees		Value added in mining (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
		Total (million dollars)	Development and exploration of mineral property (million dollars)	New and used plant, equipment, and machinery (million dollars)	Number (1,000)	Payroll (million dollars)			
United States, total.....	25,848.7	4,057.8	1,501.1	2,556.7	615.6	3,742.5	15,910.0	21,620.5	3,263.6
Northeast Region.....	1,262.7	116.0	15.1	100.9	66.5	387.1	782.6	1,185.6	116.2
New England Division.....	67.7	8.5	1.4	7.1	3.9	22.9	42.4	56.2	7.1
Maine.....	2.8	2.8	1.0	1.8	.2	.8	1.5	2.0	.3
New Hampshire.....	4.2	.8	(Z)	.7	.2	1.2	2.2	3.1	.5
Vermont.....	14.8	.9	.1	.8	.8	4.1	8.8	11.1	1.0
Massachusetts.....	24.5	2.2	.2	2.0	1.7	10.1	16.9	22.4	3.1
Rhode Island.....	4.8	.6	(Z)	.5	.2	1.1	2.0	2.7	.3
Connecticut.....	16.8	1.2	(Z)	1.2	.8	5.6	11.0	14.9	1.9
Middle Atlantic Division....	1,195.0	107.5	13.7	93.8	62.6	364.6	740.2	1,128.9	109.1
New York.....	175.5	15.7	1.8	13.9	9.9	71.2	129.7	166.6	15.3
New Jersey.....	70.1	6.4	.1	6.3	3.8	23.8	55.2	72.4	8.2
Pennsylvania.....	949.4	85.4	11.8	73.6	48.9	269.6	555.3	889.9	85.6
North Central Region.....	3,309.0	412.0	62.4	350.1	106.3	623.5	2,111.7	2,964.5	380.4
East North Central Division..	1,691.6	200.3	30.0	170.3	62.2	373.6	1,042.5	1,487.7	203.7
Ohio.....	401.3	52.3	7.6	44.8	17.6	104.2	223.9	318.8	45.8
Indiana.....	166.8	19.7	1.7	17.9	7.3	41.8	107.5	143.3	19.4
Illinois.....	589.5	68.0	10.3	57.7	22.0	135.4	450.5	654.5	57.0
Michigan.....	483.7	52.8	10.1	42.7	12.2	75.2	223.1	316.4	76.1
Wisconsin.....	50.3	7.5	.3	7.1	3.1	17.0	37.5	54.7	5.4
West North Central Division..	1,617.4	211.7	32.4	179.3	44.1	249.9	1,069.2	1,476.5	176.7
Minnesota.....	584.4	82.1	1.6	80.5	13.2	91.0	367.7	502.1	25.2
Iowa.....	61.4	7.0	.3	6.7	2.7	13.5	33.2	44.9	5.5
Missouri.....	144.2	41.6	6.3	35.2	7.7	38.2	66.3	95.6	22.5
North Dakota.....	102.8	19.6	5.2	14.4	1.7	9.8	73.7	93.1	17.8
South Dakota.....	32.8	1.6	.2	1.5	2.6	13.7	25.6	37.9	3.0
Nebraska.....	55.6	7.2	1.1	6.1	2.1	11.2	69.3	87.8	10.7
Kansas.....	636.2	52.6	17.6	35.0	14.1	72.5	433.4	615.1	92.0
South Region	16,255.5	2,489.4	962.5	1,526.9	327.4	1,945.0	9,560.4	12,875.8	2,063.3
South Atlantic Division.....	1,987.6	251.2	25.6	225.6	82.2	434.3	1,011.6	1,574.8	136.2
Delaware.....	52.0	5.2	.1	5.1	2.4	12.8	35.3	47.4	4.9
Maryland.....									
District of Columbia.....									
Virginia.....									
West Virginia.....	1,090.5	136.7	17.1	119.6	47.6	277.0	596.1	910.6	80.0
North Carolina.....	67.4	8.8	.5	8.3	2.6	10.9	31.6	44.4	4.5
South Carolina.....	32.6	4.1	.1	4.0	1.7	6.8	19.0	26.6	2.6
Georgia.....	145.8	20.6	.5	20.1	5.7	27.1	75.8	106.7	9.5
Florida.....	336.7	45.4	4.4	41.0	6.6	32.8	109.0	215.0	19.7
East South Central Division..	1,205.8	172.1	37.5	134.6	48.9	239.6	747.0	1,103.6	120.6
Kentucky.....	627.3	82.9	9.3	73.6	27.8	131.6	337.4	541.8	52.7
Tennessee.....	151.3	19.0	2.1	16.8	6.9	32.6	90.1	126.7	13.2
Alabama.....	196.3	20.9	1.8	19.0	8.9	45.8	119.0	168.7	15.6
Mississippi.....	230.9	49.4	24.3	25.1	5.3	29.8	200.5	266.4	39.1
West South Central Division..	13,062.1	2,066.1	899.4	1,166.7	196.3	1,271.1	7,801.8	10,197.4	1,806.5
Arkansas.....	165.0	32.4	9.5	22.8	4.7	23.6	110.2	155.5	17.3
Louisiana.....	5,146.6	1,025.1	478.3	546.8	45.7	313.1	2,640.0	3,416.8	736.7
Oklahoma.....	1,223.1	188.6	91.9	96.7	32.9	199.9	805.9	1,039.5	205.0
Texas.....	6,527.4	820.0	319.7	500.4	113.0	734.5	4,245.7	5,585.6	847.5
West Region.....	5,021.5	1,040.4	461.1	579.4	115.3	787.0	3,455.2	4,594.5	704.5
Mountain Division.....	3,076.8	481.5	181.6	299.9	77.0	507.9	2,101.9	2,895.2	435.7
Montana.....	199.0	40.9	12.6	28.3	7.6	47.1	111.0	189.5	66.7
Idaho.....	63.8	11.4	1.7	9.7	3.3	19.1	40.1	51.9	5.1
Wyoming.....	625.9	90.4	38.1	52.2	8.7	60.9	453.1	560.6	76.3
Colorado.....	339.1	46.9	20.2	26.7	11.2	72.7	253.3	335.8	35.6
New Mexico.....	1,034.4	161.9	66.9	95.0	17.6	114.6	649.6	876.9	150.4
Arizona.....	369.6	60.8	15.0	45.8	15.2	107.4	287.4	385.9	42.6
Utah.....	357.5	54.3	24.3	30.0	10.7	68.8	267.8	423.8	53.3
Nevada.....	87.5	14.9	2.8	12.1	2.7	17.3	39.6	70.8	5.7
Pacific Division.....	1,944.7	558.9	279.5	279.5	38.3	279.1	1,353.3	1,699.3	268.8
Washington.....	28.7	7.6	3.3	4.3	1.9	11.9	24.6	34.8	4.1
Oregon.....	35.1	5.6	3.0	2.7	1.9	11.2	17.7	25.7	4.4
California.....	1,687.8	342.6	163.0	179.6	32.9	242.2	1,253.6	1,569.9	225.9
Alaska.....	187.6	201.3	110.2	91.1	1.3	12.1	52.6	62.4	33.9
Hawaii.....	5.5	1.8	-	1.8	.3	1.7	4.9	6.5	.5

TABLE 4. Industry Shipments and Receipts and Net Shipments of Primary Products: 1967

(In millions of dollars)

Ind. code	Industry or subindustry	Shipments and receipts of establishments classified in the industry					Net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for secondary services	Products purchased and resold with- out further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
10	METAL MINING								
1011	Iron ores.....	953.4	(D)	(D)	1.8	(D)	863.2	(D)	(D)
1021	Copper ores.....	675.9	648.5	(D)	(D)	(D)	540.3	534.1	6.2
1031	Lead and zinc ores.....	151.2	149.8	(D)	(D)	-	134.5	127.4	7.1
	Lead ores subindustry.....	65.5	53.1	(D)	(D)	-	54.5	41.0	13.5
	Zinc ores subindustry.....	85.6	70.2	(D)	(D)	-	80.0	67.0	13.0
104	Gold and silver ores:								
1042	Lode gold.....	42.3	41.4	(D)	-	(D)	41.5	41.4	0.1
1043	Placer gold.....	2.5	(D)	(D)	-	-	2.5	2.5	(Z)
1044	Silver ores.....	18.5	17.9	(D)	-	(D)	20.9	17.9	3.0
1051	Bauxite and other aluminum ores.....	28.8	(D)	(D)	-	(D)	24.7	(D)	(D)
106	Ferroalloy ores, except vanadium:								
1062	Manganese ores.....	4.0	(D)	(D)	-	-	(D)	(D)	-
1064	Tungsten ores.....	104.3	(D)	(D)	-	-	100.7	(D)	(D)
1069	Ferroalloy ores, n.e.c.								
1081	Metal mining services.....	48.3	45.7	(D)	(D)	(Z)	45.7	45.7	(Z)
109	Miscellaneous metal ores:								
1092	Mercury ores.....	10.6	10.5	(D)	(D)	(D)	¹ 10.9	(D)	(D)
1093	Titanium ores.....	23.5	17.2	6.3	-	-	² 18.7	² 17.2	² 1.5
1094	Uranium-radium-vanadium ores.....	218.2	216.4	(D)	1.3	(D)	³ 180.8	³ 180.8	-
1099	Metallic ores, n.e.c.	14.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	ANTHRACITE MINING								
1111	Anthracite.....	146.0	143.5	(D)	(D)	0.5	⁴ 100.0	⁴ 99.8	⁴ 0.2
1112	Anthracite mining services.....	9.9	9.7	(D)	-	(D)	9.7	9.7	-
12	BITUMINOUS COAL AND LIGNITE MINING								
1211	Bituminous coal.....	2,897.5	2,878.3	1.8	2.9	14.4	⁴ 2,576.8	⁴ 2,576.0	⁴ 0.8
1212	Lignite.....	17.9	17.7	(D)	(D)	-	¹ 17.7	¹ 17.7	-
1213	Bituminous coal and lignite mining services, n.e.c.	29.3	29.2	-	-	0.1	30.1	29.2	0.9
13	OIL AND GAS EXTRACTION								
1311	Crude petroleum and natural gas.....	11,731.7	11,687.9	-	41.6	3.0	11,740.2	11,687.1	53.1
	Crude petroleum subindustry.....	9,648.7	8,098.7	1,508.7	38.4	2.9	8,841.7	8,098.7	743.0
	Natural gas subindustry.....	2,082.9	1,381.1	698.4	3.3	0.1	2,898.5	1,381.1	1,517.4
1321	Natural gas liquids.....	3,707.6	3,683.2	(D)	-	(D)	1,122.2	1,078.2	44.0
138	Oil and gas field services:								
1381	Drilling oil and gas wells.....	893.7	835.2	45.2	12.3	1.0	873.1	835.2	37.9
1382	Oil and gas exploration services.....	152.0	145.4	(D)	(D)	4.4	146.4	145.4	1.0
1389	Oil and gas field services, n.e.c.	971.0	925.7	6.3	13.0	26.0	958.8	925.7	33.1
14	NONMETALLIC MINERALS, EXCEPT FUELS								
1411	Dimension stone.....	22.1	20.0	1.6	0.1	0.4	28.2	20.0	8.2
	Dimension limestone subindustry.....	6.5	5.3	1.0	(D)	(D)	9.3	5.3	4.0
	Dimension granite subindustry.....	8.7	8.5	(D)	(D)	(D)	9.8	8.5	1.3
	Dimension stone, n.e.c., subindustry.....	7.0	6.2	(D)	(D)	0.2	9.2	6.2	2.9
142	Crushed and broken stone:								
1422	Crushed and broken limestone.....	666.6	608.6	40.3	6.4	11.3	⁵ 647.3	600.7	⁵ 46.6
1423	Crushed and broken granite.....	114.2	106.0	7.3	(D)	(D)	⁵ 110.3	105.7	⁵ 4.6
1429	Crushed and broken stone, n.e.c.	182.7	165.6	12.4	2.5	2.1	⁵ 188.4	162.7	⁵ 25.7
1441	Sand and gravel.....	625.4	581.0	25.7	9.3	9.4	⁵ 659.2	570.9	⁵ 88.3

See footnotes at end of table.

TABLE 4. Industry Shipments and Receipts and Net Shipments of Primary Products: 1967—Continued

(In millions of dollars)

Ind. code	Industry or subindustry	Shipments and receipts of establishments classified in the industry					Net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
14	NONMETALLIC MINERALS, EXCEPT FUELS--Continued								
1446	Industrial sand, n.e.c.:								
	Glass sand subindustry.....	36.4	25.4	(D)	(D)	(D)	34.0	25.3	8.7
	Molding sand subindustry.....	25.5	21.4	(D)	(D)	(D)	27.8	20.8	7.0
	Industrial sand, n.e.c., subindustry.....	27.8	20.4	7.2	(D)	(D)	29.0	19.8	9.2
145	Clay and related minerals:								
1452	Bentonite.....	21.2	19.7	(D)	(D)	(D)	(D)	⁶ 20.1	(D)
1453	Fire clay.....	23.1	22.2	(D)	-	(D)	⁷ 31.7	22.2	⁷ 9.5
1454	Fuller's earth.....	22.5	19.7	(D)	(D)	(D)	(D)	(D)	-
1455	Kaolin and ball clay.....	87.9	86.6	0.6	-	0.7	⁸ 9.7	(D)	(D)
1456	Feldspar.....	9.4	(D)	(D)	-	-	9.0	8.6	0.4
1459	Clay and related minerals, n.e.c.	54.1	52.3	1.3	(D)	(D)	⁸ 80.4	51.1	⁸ 29.3
147	Chemical and fertilizer minerals:								
1472	Barite.....	19.6	(D)	(D)	(D)	(D)	(D)	19.5	(D)
1473	Fluorspar.....	19.6	(D)	(D)	(D)	(D)	16.6	16.6	-
1474	Potash, soda, and borate minerals.....	215.7	211.0	(D)	-	(D)	206.3	206.3	-
1475	Phosphate rock.....	296.6	293.9	(D)	(D)	(D)	240.8	240.8	-
1476	Rock salt.....	81.3	(D)	(D)	-	(D)	79.8	(D)	(D)
1477	Sulfur.....	271.2	271.2	-	-	-	271.2	271.2	-
1479	Chemical and fertilizer mining, n.e.c.	5.6	(D)	(D)	-	(D)	13.3	4.9	8.4
1481	Nonmetallic mineral services.....	15.3	(D)	(D)	(D)	(Z)	16.2	(D)	(D)
149	Miscellaneous nonmetallic minerals:								
1492	Gypsum.....	9.3	(D)	(D)	-	-	⁹ 34.3	(D)	(D)
1493	Mica.....	6.7	(D)	-	-	(D)	7.0	6.3	¹⁰ 0.7
1494	Native asphalt and bitumens.....	8.7	(D)	(D)	-	(D)	8.7	8.7	-
1495	Pumice and pumicite.....	2.8	(D)	(D)	-	(D)	3.3	(D)	(D)
1496	Talc, soapstone, and pyrophyllite.....	21.3	20.4	(D)	(D)	(D)	20.3	(D)	(D)
1497	Natural abrasives, except sand.....	5.7	(D)	(D)	-	(D)	5.7	(D)	(D)
1498	Peat.....	8.5	(D)	(D)	(D)	(D)	8.4	8.4	-
1499	Nonmetallic minerals, n.e.c.	88.9	85.7	(D)	-	(D)	87.8	87.4	0.5

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.
n.e.c. Not elsewhere classified.

¹Represents gross shipments.

²Represents gross shipments of titanium concentrates.

³Represents gross shipments less minerals received for preparation.

⁴Represents raw coal shipped for use without preparation plus prepared coal.

⁵Includes the estimated value of minerals produced and used in the same manufacturing establishment in making manufactured products.

⁶Includes bentonite produced in other mineral industries, amounting to approximately 2 percent of total shown.

⁷Includes the estimated value of fire clay produced and used in the same establishment in the manufacture of cement and clay products.

⁸Includes the estimated value of common clay and shale produced and used in the same establishment in the manufacture of cement and clay products.

⁹Includes the estimated value of gypsum products produced and used in the same establishment in the manufacture of calcined gypsum products.

¹⁰Excludes crushed, ground, screened, and dried gypsum produced in establishments which did not mine gypsum.

¹⁰Represents gross shipments from other industries, principally material processed in the manufacturing industries.

TABLE 5. Employment at Central Administrative Offices and Related Facilities by Industry Groups and Industries: 1967 and 1963

Code	Industry group and industry	1967		1963	
		Number of employees	Payroll	Number of employees	Payroll
		(1,000)	(million dollars)	(1,000)	(million dollars)
	All mineral industries.....	51.0	529.3	46.3	416.2
10	Metal mining.....	4.2	49.9	4.8	47.8
1011	Iron ores.....	1.3	18.5	2.1	23.3
1021	Copper ores.....	2.0	22.1	2.0	18.0
103	Lead and zinc ores.....	0.3	3.9	0.3	2.5
109	Miscellaneous metal ores.....	0.3	3.2	0.2	1.6
11	Anthracite mining.....	0.3	2.0	0.5	2.2
1111	Anthracite.....	0.3	2.0	0.5	2.2
12	Bituminous coal and lignite mining.....	5.2	46.3	4.0	31.8
13	Oil and gas extraction.....	34.9	364.3	31.1	284.4
131	Crude petroleum and natural gas.....	31.0	328.4	29.0	266.8
1312	Crude petroleum subindustry.....	28.2	305.3	26.6	248.8
1313	Natural gas subindustry.....	2.7	23.1	2.4	18.0
1321	Natural gas liquids.....	0.4	4.2	(NA)	(NA)
138	Oil and gas field services.....	3.5	31.7	(NA)	(NA)
1381	Drilling oil and gas wells.....	0.6	6.2	0.4	3.6
1382	Oil and gas field exploration services.....	0.7	5.6	0.2	1.6
1389	Oil and gas field services, n.e.c.	2.2	19.9	(NA)	(NA)
14	Nonmetallic minerals, except fuels.....	6.5	66.8	5.9	50.0
142	Crushed and broken stone.....	1.2	12.9	1.4	12.8
1422	Crushed and broken limestone.....	0.7	6.6	0.7	6.9
1423	Crushed and broken granite.....	(Z)	0.6	(NA)	(NA)
1429	Crushed and broken stone, n.e.c.	0.5	5.7	(NA)	(NA)
144	Sand and gravel.....	1.1	10.5	1.1	8.8
1442	Construction sand and gravel.....	0.9	8.1	(NA)	(NA)
	Industrial sand: molding sand subindustry...	0.1	0.8	(NA)	(NA)
145	Clay and related minerals.....	0.4	4.0	0.2	1.5
147	Chemical and fertilizer minerals.....	3.4	36.3	3.0	25.3
1474	Potash, soda, and borate minerals.....	0.9	10.1	(NA)	(NA)

Note: Figures in this table represent central administrative offices at different locations from the establishments managed or served, or at the same location as one of these establishments but not operated as an integral part of it. All figures in this table have been included in the reports for the industries with which they are associated.

Detail may not add to the totals due to independent rounding.

(NA) Not available. (Z) Less than 50 employees. n.e.c. Not elsewhere classified.

TABLE 6. Employment at Central Administrative Offices and Related Facilities by Divisions and Selected States: 1967 and 1963

Division and States	1967		1963	
	Number of employees	Payroll	Number of employees	Payroll
	(1,000)	(million dollars)	(1,000)	(million dollars)
United States, total.....	51.0	529.3	46.3	416.2
New England Division.....	0.4	4.8	0.2	2.5
Middle Atlantic Division.....	4.8	53.9	4.7	41.3
New York.....	2.2	28.7	2.1	21.2
New Jersey.....	0.3	2.9	0.3	2.6
Pennsylvania.....	2.3	22.3	2.2	17.6
East North Central Division.....	4.5	52.2	3.7	34.5
Ohio.....	2.0	25.3	1.4	15.0
Indiana.....	0.4	3.9	0.5	4.1
Illinois.....	1.7	18.7	1.4	10.9
Michigan.....	0.5	4.0	(NA)	(NA)
Wisconsin.....	(Z)	0.4	(NA)	(NA)
West North Central Division.....	2.9	24.5	2.9	24.2
Minnesota.....	0.6	5.8	1.4	14.3
Kansas.....	0.3	2.4	(D)	(D)
South Atlantic Division.....	1.9	17.8	1.6	12.6
District of Columbia.....	(Z)	0.2	(NA)	(NA)
Virginia.....	0.4	3.4	0.3	2.1
West Virginia.....	0.9	7.7	0.8	6.5
Georgia.....	0.1	0.6	(Z)	0.4
Florida.....	0.2	2.3	0.2	1.6
East South Central Division.....	0.6	5.9	0.4	2.7
Kentucky.....	0.3	2.7	0.1	0.9
Tennessee.....	0.1	1.0	0.1	(D)
West South Central Division.....	28.3	290.5	26.7	242.8
Oklahoma.....	7.1	69.5	6.4	57.2
Texas.....	16.2	168.1	17.7	160.4
Mountain Division.....	2.7	28.8	2.9	25.1
Wyoming.....	0.2	2.0	0.4	(D)
Colorado.....	1.2	14.0	1.0	9.3
New Mexico.....	0.2	1.7	0.4	(D)
Arizona.....	0.2	2.3	(NA)	(NA)
Utah.....	0.4	4.2	0.3	2.9
Pacific Division.....	4.8	50.9	3.2	30.5
California.....	4.6	49.0	3.1	30.1

Note: Figures in this table represent central administrative offices at different locations from the establishments managed or served, or at the same location as one of these establishments but not operated as an integral part of it. All figures in this table have been included in the reports for the States where they are located.

Detail may not add to the total due to independent rounding.

(D) Withheld to avoid disclosing figures of individual companies.
than 50 employees.

(NA) Not available. (Z) Less

TABLE 7. 1967 Bureau of the Census and Bureau of Mines Statistics Compared

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including interplant transfers		Production ¹	Shipments ¹	
			Quantity	Value		Quantity	Value
		(quantity)		(million dollars)	(quantity)		(million dollars)
METAL ORES AND CONCENTRATES							
Iron ore, except manganese iron ore:							
Crude iron ore.....	Million long tons....	178.8	(D)	(D)	183.4	(NA)	(NA)
Net production and shipments.....	do.....	² 85.9	³ 82.7	³ 863.2	84.2	82,415.0	817.5
Manganese iron ore (net production and shipments).....	do.....	(²)	(D)	(D)	(NA)	⁴ 3,237	(NA)
Copper, lead, zinc, gold, and silver ores (production and net shipments).....	Million short tons....	⁵ 148.3	(NA)	(NA)	150.6	(NA)	(NA)
Metal content of copper, lead, zinc, gold, and silver-bearing materials							
Copper ⁶	Million pounds.....	1,908.9	(NA)	(NA)	1,908.1	(NA)	⁷ 229.4
Lead ⁶	do.....	616.7	(NA)	(NA)	658.6	(NA)	⁷ 85.7
Zinc ⁶	do.....	1,121.4	(NA)	(NA)	1,085.8	(NA)	⁷ 151.6
Gold ⁶	1,000 fine ounces....	1,570.0	(NA)	(NA)	1,539.0	(NA)	⁷ 55.4
Silver ⁶	do.....	(D)	(NA)	(NA)	32,345.0	(NA)	⁷ 50.1
Copper ores:							
Crude ore mined in the Copper Ores Industry (production and net shipments).....	Production--million short tons of ore or concentrates.	127.5	Copper	4.3	⁸ 127.1	⁸ Copper	(NA)
Copper concentrates.....		3.0	1,591.4	459.8	(NA)	1,608.1	(NA)
Copper precipitates (metal content).....		(NA)	301.5	76.6	(NA)	255.0	(NA)
Lead and zinc ores:	Shipments--million pounds of metal contained.						
Crude ore mined in the Lead and Zinc Ores Industry (production and net shipments).....		17.1	Lead-	6.5	⁹ 19.4	Lead-	(NA)
Lead concentrates.....		0.4	Zinc-	50.8	(NA)	Zinc-	(NA)
Zinc concentrates.....		0.9	1,129.2	77.2	(NA)	⁹ 1,033.9	(NA)
Lode gold:							
Crude ore mined in the Lode Gold Industry (production and net shipments).....	Production--million short tons of ore or concentrates.	3.2			¹⁰ 3.2	Gold-	(NA)
Gold concentrates.....		(NA)	Gold-		(NA)	¹¹ 76.3	(NA)
Mill bullion.....		(NA)	1,156.0	41.0	(NA)	¹² 1,010.6	(NA)
Placer gold.....	1,000 fine ounces....	63.8	63.8	2.2	65.0	(NA)	⁷ 2.3
Silver ores:							
Crude ore mined in the Silver Ores Industry (production and net shipments).....	Production--1,000 short tons of ore or concentrates.	700.0	Silver-		¹³ 904.0	Silver-	(NA)
Silver concentrates and mill bullion.....		(NA)	14,916.0	20.0	(NA)	¹⁴ 12,303.0	(NA)
		(NA)			(NA)		(NA)
Bauxite:							
Crude bauxite.....	Million long tons....	2.1	2.1	23.1	2,051	(NA)	(NA)
Net shipments.....	do.....	(X)	¹⁵ 2.0	¹⁵ 21.5	(X)	2.1	22.6
Manganese ores.....	do.....	(NA)	(NA)	(NA)	(NA)	¹⁶ .1	(NA)
Mercury ores:							
Crude mercury ores.....	1,000 short tons....	373.8	(D)	(D)	¹⁷ 440.0	(NA)	(NA)
Mercury metal.....	1,000 flasks (76 pounds).....	23.0	22.7	10.9	¹⁸ 23.8	(NA)	¹⁸ 11.6
Titanium ores:							
Crude titanium ores.....	Million short tons....	28.0	(X)	(X)	(NA)	(NA)	(NA)
Titanium concentrates.....	do.....	.9	.9	18.7	¹⁹ .9	¹⁹ .9	¹⁹ 18.5
Uranium-radium-vanadium ores:							
Crude uranium-vanadium ores.....	do.....	5.5	1.7	29.2	(NA)	²⁰ 5.2	²⁰ 80.5
Uranium-vanadium concentrates.....	do.....	²¹ (Z)	²¹ (Z)	²¹ 187.5	²² (Z)	(NA)	(NA)
Zirconium concentrates.....	Short tons.....	(NA)	(NA)		(NA)	(NA)	
Antimony, beryllium, germanium, bastnaesite, monazite, and thorium concentrates and platinum group metals.....		(X)	(X)	16.3	(X)	(X)	15.0

See footnotes at end of table.

TABLE 7. 1967 Bureau of the Census and Bureau of Mines Statistics Compared —Continued

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including interplant transfers		Production ¹	Shipments ¹	
			Quantity	Value		Quantity	Value
		(quantity)		(million dollars)	(quantity)		(million dollars)
COAL							
Anthracite (net production and shipments).....	Million short tons...	11.8	²³ 12.4	²³ 100.0	12.3	12.1	95.9
Bituminous coal (net production and shipments)...	Million short tons...	(NA)	²³ 545.1	²³ 2,576.8	548.1	(NA)	²⁴ 2,546.8
Lignite (net production and shipments).....	...do.....	(NA)	²³ 6.8	²³ 17.7	4.5	(X)	²⁴ 8.6
OIL AND GAS							
Crude petroleum, including field condensate and drips.....	Million barrels.....	²⁵ 3,064.8	3,057.4	8,841.7	3,215.7	(NA)	²⁴ 9,375.9
Natural gas.....	Billion cu. ft.....	9,308.9	17,185.1	2,898.5	20,251.8	²⁶ 18,171.3	²⁶ 2,898.7
Natural gas liquids (net production and net shipments).....	1,000 barrels.....	498,000.0	497,100.0	1,122,200.0	514,456.0	489,720.0	²⁴ 1,179,936.0
Natural gas received for processing.....	Billion cu. ft.....	(X)	16,002.0	2,569.3	(X)	15,641.6	(NA)
Residue gas:							
Shipped.....	...do.....	(X)	14,395.8	2,431.6	(X)	²⁷ 14,299.0	(NA)
Used for fuel at plant.....	...do.....	504.0	(X)	(X)	522.9	(X)	(X)
NONMETALLIC MINERALS, EXCEPT FUELS ¹							
Dimension stone, total.....	1,000 short tons....	(NA)	2,761.7	90.9	(NA)	2,011.1	95.5
Rough (net).....	...do.....	(NA)	1,915.0	25.6	(NA)	²⁸ 1,011.0	²⁸ 22.4
Dressed.....	...do.....	(NA)	846.7	65.3	(NA)	²⁸ 1,000.0	²⁸ 73.1
Limestone, total.....	...do.....	(NA)	1,230.7	19.5	(NA)	561.0	16.6
Rough (net).....	...do.....	(NA)	989.7	9.2	(NA)	279.0	4.5
Dressed.....	...do.....	(NA)	241.0	10.3	(NA)	282.0	12.1
Granite, total.....	...do.....	(NA)	725.1	37.4	(NA)	630.0	39.0
Rough (net).....	...do.....	(NA)	367.3	8.8	(NA)	337.0	11.8
Dressed.....	...do.....	(NA)	357.8	28.5	(NA)	293.0	27.2
Stone, n.e.c., total.....	...do.....	(NA)	806.0	34.1	(NA)	820.0	39.9
Rough (net).....	...do.....	(NA)	558.0	7.6	(NA)	²⁸ 395.0	²⁸ 6.1
Dressed.....	...do.....	(NA)	248.0	26.5	(NA)	²⁸ 425.0	²⁸ 33.8
Crushed and broken stone (net), total.....	...do.....	(NA)	(NA)	(NA)	(NA)	²⁹ 783,559.0	²⁹ 1,111.5
Excluding Federal, State, and local government operations.....	...do.....	³⁰ 706,007.5	588,286.2	946.0	(NA)	(NA)	(NA)
Commercial.....	...do.....	(NA)	(NA)	(NA)	(NA)	²⁹ 720,594.0	²⁹ 1,034.7
Government and contractor.....	...do.....	(NA)	(NA)	(NA)	(NA)	62,965.0	76.8
Limestone ³¹.....	...do.....	³⁰ 548,515.5	436,688.4	647.0	(NA)	568,902.0	783.1
Granite ³¹.....	...do.....	³⁰ 67,553.0	64,879.5	110.3	(NA)	62,443.0	²⁹ 94.7
Stone, n.e.c. ³¹.....	...do.....	³⁰ 89,939.0	86,718.3	188.4	(NA)	²⁹ 152,214.0	²⁹ 233.7
Construction sand, total.....	Million short tons...	(NA)	(NA)	(NA)	(NA)	333.9	324.0
Excluding Federal, State, and local government operations.....	...do.....	389.6	371.9	386.4	(NA)	(NA)	(NA)
Commercial.....	...do.....	(NA)	(NA)	(NA)	(NA)	279.8	280.7
Government and contractor.....	...do.....	(NA)	(NA)	(NA)	(NA)	54.0	43.3
Glass sand.....	...do.....	9.5	9.5	34.0	(NA)	9.3	30.3
Molding sand.....	...do.....	8.5	8.4	27.8	(NA)	9.5	26.9
Industrial sand, n.e.c. ....	...do.....	6.8	6.6	29.0	(NA)	6.6	28.6
Gravel, total.....	...do.....	(NA)	(NA)	(NA)	(NA)	547.8	571.9
Excluding Federal, State, and local government operations.....	...do.....	228.6	224.8	271.9	(NA)	(NA)	(NA)
Commercial.....	...do.....	(NA)	(NA)	(NA)	(NA)	362.4	411.8
Government and contractor.....	...do.....	(NA)	(NA)	(NA)	(NA)	185.4	160.1
Bentonite:							
Crude bentonite.....	1,000 short tons....	³² 2,207.7	¹⁵ 362.6	¹⁵ 1.7	(NA)	(NA)	(NA)
Net shipments by the mineral industries.....	...do.....	(X)	1,973.9	20.1	³³ 2,042.8	(NA)	³³ 20.5
Fire clay:							
Crude fire clay.....	...do.....	4,251.0	2,097.2	16.2	³³ 7,972.4	(NA)	³³ 42.2
Prepared fire clay.....	...do.....	(NA)	826.7	6.0			

See footnotes at end of table.

TABLE 7. 1967 Bureau of the Census and Bureau of Mines Statistics Compared —Continued

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including inter-plant transfers		Production ¹	Shipments ¹	
			Quantity	Value		Quantity	Value
		(quantity)		(million dollars)	(quantity)		(million dollars)
NONMETALLIC MINERALS, EXCEPT FUELS ¹ —Continued							
Fuller's earth (net shipments).....	1,000 short tons.....	(X)	761.2	19.7	³³ 803.9	(NA)	³³ 20.5
Kaolin and ball clay:							
Crude kaolin and ball clay.....	...do.....	³² 6,277.6	¹⁵ 415.3	¹⁵ 3.1	³³ 4,532.0	(NA)	³³ 88.8
Prepared kaolin and ball clay.....	...do.....	(NA)	4,087.2	85.6			
Feldspar							
Crude feldspar.....	...do.....	1,190.6	34.6	0.2	³³ 689.2	(NA)	³³ 7.1
Prepared feldspar.....	...do.....	(NA)	635.2	8.8	(NA)	663.2	8.8
Common clay and shale:							
Crude common clay and shale.....	...do.....	³⁴ 30,701.0	1,600.7	2.9	³³ 39,312.0	(NA)	³³ 52.0
Prepared common clay and shale.....	...do.....	(NA)	6,436.8	32.2			
Other clay, ceramic, and refractory minerals:							
Crude.....	...do.....	(NA)	206.6	1.5	(NA)	(NA)	(NA)
Prepared.....	...do.....	(NA)	1,119.3	17.6	(NA)	(NA)	(NA)
Barite:							
Crude barite.....	...do.....	974.0	203.6	2.4	³⁵ 944.0	(NA)	(NA)
Prepared barite.....	...do.....	(NA)	(D)	(D)	1,320.0	³⁶ 1,315.0	33.0
Net shipments by the barite industry.....	...do.....	(X)	¹⁵ 959.6	¹⁵ 19.5	(X)	³³ 962.0	³³ 11.6
Fluorspar:							
Production and shipments:							
Crude fluorspar.....	...do.....	829.4	152.9	1.1	83.9	(NA)	(NA)
Prepared fluorspar.....	...do.....	³⁷ 391.3	³⁷ 387.5	³⁷ 15.5	284.0	(NA)	(NA)
Net shipments.....	...do.....	(X)	(³⁸)	13.2	(X)	³⁹ 29.6	³⁹ 13.2
Crude fluorspar prepared.....	...do.....	³⁷ 1,035.7	(NA)	(NA)	915.0	(NA)	(NA)
Potash, soda, and borate minerals:							
Potassium salts:							
Crude salts.....	...do.....	21,340.0	⁴⁰ 5,486.4	⁴⁰ 102.5	18,906.0	(NA)	(NA)
Processed or refined salts.....	...do.....	5,573.4			⁴¹ 5,649.0	(NA)	²⁴ 105.3
Sodium carbonates.....	...do.....	(NA)	1,754.7	37.1	(NA)	³³ 1,726.0	³³ 40.5
Sodium sulfates.....	...do.....	(NA)	1,554.4	66.7	(NA)	³³ 637.0	³³ 10.7
Boron compounds.....	...do.....	(NA)			(NA)	³³ 955.0	³³ 74.1
Phosphate rock:							
Crude ore or matrix.....	1,000 long tons.....	114.8	5.3	13.5	129.0	(NA)	(NA)
Washed or concentrated.....	...do.....	30.6	15.4	72.1	36.0	(NA)	(NA)
Dried, calcined, or sintered.....	...do.....	27.2	27.0	208.4	(NA)	(NA)	(NA)
Net shipments.....	...do.....	(X)	¹⁵ 34.4	¹⁵ 241.9	(X)	³³ 37.8	³³ 251.2
			⁴² 32.4	⁴² 240.8			
Rock salt.....	1,000 short tons.....	(NA)	¹⁵ 11,747.8	¹⁵ 79.8	(NA)	³³ 11,661.0	³³ 72.0
Native sulfur and sulfur ore.....	1,000 long tons.....	7,004.1	7,607.3	271.2	7,015.0	7,683.0	251.7
Frasch process sulfur.....	...do.....	7,004.1	7,607.3	271.2	7,014.0	7,682.0	251.7
Sulfur ore.....	...do.....				1.0	1.0	(Z)
Gypsum:							
Crude.....	1,000 short tons.....	⁴³ 9,229.5	585.1	1.5	9,313.0	(NA)	34.4
Prepared (crushed, ground, screened, or dried).....	...do.....	(NA)	5,021.1	23.0	(NA)	(NA)	(NA)
Mica:							
Hand cobbled and sheet mica.....	1,000 lbs.....	-	-	-	³³ 20.5	(NA)	(D)
Scrap (or flake) mica.....	1,000 short tons.....	156.0	⁴⁴ 35.0	⁴⁴ 1.1	³³ 119.5	(NA)	³³ 2.9
Ground mica.....	...do.....	⁴³ 119.6	⁴³ 119.7	⁴⁵ 5.9	³³ 97.0	(NA)	³³ 5.8
Native asphalt and bitumens:							
Gilsonite.....	...do.....	(D)	(D)	8.7	1,867.7	(NA)	8.1
Bituminous limestone and sandstone.....	...do.....	1,698.0	1,698.0				
Pumice and pumicite.....	...do.....	1,329.3	1,322.1	3.3	³³ ⁴⁶ 3,446.0	(NA)	³³ ⁴⁶ 5.1
Talc, soapstone, and pyrophyllite:							
Crude.....	...do.....	980.9	⁴⁴ 293.9	⁴⁴ 3.2	⁴⁷ 963.5	(NA)	⁴⁷ 6.7
Prepared.....	...do.....	⁴⁸ 611.7	⁴⁸ 604.6	⁴⁸ 17.0	⁴⁷ ⁴⁹ 781.0	(NA)	⁴⁷ ⁴⁹ 20.2
Natural abrasives, except sand.....	...do.....	104.8	103.2	5.7	³³ 94.0	(NA)	³³ 2.8

See footnotes at end of table.

TABLE 7. 1967 Bureau of the Census and Bureau of Mines Statistics Compared —Continued

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including interplant transfers		Production ¹	Shipments ¹	
			Quantity	Value		Quantity	Value
		(quantity)		(million dollars)	(quantity)		(million dollars)
NONMETALLIC MINERALS, EXCEPT FUELS--Continued							
Peat.....	1,000 short tons.....	587.2	587.6	8.4	⁴⁹ 620.0	(NA)	⁴⁹ 6.8
Asbestos, crude and prepared.....	...do.....	119.5	122.2	11.2	⁵⁰ 123.2	(NA)	⁵⁰ 11.1
Diatomite, prepared.....	...do.....	⁵¹ 706.1	⁵¹ 618.3	⁵¹ 37.3	⁵² 627.2	(NA)	⁵² 34.0
Perlite.....	...do.....	538.1	⁵³ 414.9	⁵³ 4.8	³³ 413.0	(NA)	³³ 4.0
Shell.....	...do.....	13.7	13.8	24.5	³³ 22.0	(NA)	³³ 33.3
Other nonmetallic minerals.....	...do.....	(NA)	(NA)	10.0	(X)	(NA)	8.7

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹For nonmetallic minerals (except fuels), unless otherwise noted, figures represent minerals "sold or used by producers".

²Manganiferous iron ore is included with "iron ore, except manganiferous iron ore."

³Represents direct-shipping ore, treated ores to consumers, and agglomerates.

⁴Represents manganiferous iron ore and for Minnesota ferruginous manganese ore.

⁵Represents only ores mined in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries.

⁶Census quantity figures represent gross metal content; Bureau of Mines quantity figures represent recoverable metal content of mine production.

⁷Estimated by the Bureau of Mines from the quantity of mine production and an average price. For copper, lead, and zinc, represents the weighted average unit price of domestic refined metals delivered to purchasers. For gold, represents the price under authority of the Gold Reserve Act of January 31, 1944. For silver, represents the Treasury buying price for newly mined silver.

⁸Represents copper ore sold or treated.

⁹Represents lead ore; zinc ore; lead-zinc ore; and copper-lead, copper-zinc, and copper-lead-zinc ores.

¹⁰Represents gold and gold-silver ore produced

¹¹Represents metal contained in gold ore and gold-silver ore produced less mill bullion produced.

¹²Represents production.

¹³Represents silver ore and old tailings produced.

¹⁴Represents metal contained in silver ore.

¹⁵Represents gross shipments less receipts from other establishments for preparation or treatment.

¹⁶Represents manganese ore (35 percent or more manganese) and ferruginous manganese ore, except in Minnesota. These shipments represent marketable ores for the consumer. Besides direct-shipping ore, they include without duplication concentrates and nodules made from domestic ores.

¹⁷Represents mercury ores treated.

¹⁸Represents value of production calculated at average New York price.

¹⁹Excludes concentrates which were withheld to avoid disclosing individual company data.

²⁰Represents uranium ore shipped to mills. The value figure represents the value of such ore at the mine.

²¹Includes slurry, and low-grade concentrates shipped to mills for further upgrading.

²²Represents 8 thousand tons of U₃O₈ contained in uranium concentrates valued at \$117,000 thousand and 5 thousand tons of vanadium contained in vanadium ores and concentrates valued at \$21,331 thousand.

²³Represents raw coal shipped for use without preparation plus prepared coal.

²⁴Represents value of production.

²⁵Represents crude petroleum shipped plus crude petroleum produced and used at the same establishment in lease operations.

²⁶Represents marketed production, "comprising gas sold or consumed by producers, including losses in transmission, amounts added to storage, and increases in gas in pipe lines." Census figures show 640.5 billion cubic feet of gas produced and used in the same establishment in lease operations and net increase in underground storage of 2.5 billion cubic feet; these figures are not included in the Census shipments figures shown.

²⁷Represents "returned to formation," "shipped to transmission companies," "direct deliveries to consumers," and "unaccounted for".

²⁸Figures for rough monumental marble are included with those for dressed monumental marble.

²⁹Excludes shell.

³⁰Represents stone shipments plus stone mined and used in the same establishment in making cement, lime, and other manufactured products.

³¹Census figures exclude operations by Federal, State, and local governments. Bureau of Mines figures represent totals for all stone sold or used by commercial, government, and contractor operations.

³²Represents quantity mined and prepared at same establishment plus quantity of crude net shipments.

³³Represents minerals sold or used by producers.

³⁴Represents quantity mined and used at the same establishment in making cement, clay products, and prepared clay plus quantity of crude clay shipped.

³⁵Represents mine or plant output of primary barite.

³⁶Represents crushed and ground barite sold by producers.

³⁷Includes foreign ores prepared in the United States.

³⁸Not shown, since a significant tonnage cannot be computed by the only method available; subtraction of minerals received for preparation from the gross tonnage shipped, with both of these tonnages including large quantities of foreign ores.

³⁹Represents shipments.

⁴⁰Represents net shipments obtained from gross shipments of crude and processed or refined salts by subtracting shipments of crude salts to other establishments for processing or refining.

⁴¹Represents production of marketable potassium salts and probably includes some marketable crude salts.

⁴²Represents shipments of crude ore or matrix, except to washer or concentrator; washed or concentrated rock, except to drier; and dried, calcined, or sintered rock.

⁴³In addition to gypsum mined for shipment in crude or prepared form, includes 6,212.2 thousand tons of gypsum valued at approximately \$24,009 thousand, produced and used in the same establishment in the manufacture of calcined gypsum products.

⁴⁴Represents net shipments, that is gross shipments less minerals received for preparation.

⁴⁵Excludes mica processed at establishments classified in the manufacturing industries.

⁴⁶Includes volcanic cinder.

⁴⁷Excludes dimension soapstone.

⁴⁸Excludes ores processed at establishments classified in the manufacturing industries.

⁴⁹Represents sales.

⁵⁰Represents gem stones, vermiculite, graphite, greensand marl, stauroilite, and for other Census items not elsewhere classified.

⁵¹Includes crude diatomite produced for shipment without preparation, amounting to less than one percent of the total.

⁵²Represents average annual production, 1960-1962.

⁵³Includes some expanded perlite produced in conjunction with mining.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both “gross” and “net” shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total “value of shipments and receipts” for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

“Value of shipments” used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

“Capital expenditures” used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

Appendix B

INDUSTRY DESCRIPTIONS

This appendix contains descriptions of the 53 4-digit industries for which data were compiled and published in the 1967 Census of Mineral Industries. The industries are the same as those described in the 1967 edition of the Standard Industrial Classification (SIC) Manual.

The industry titles and descriptions, in general, agree with those appearing in the SIC manual, but the descriptions have been expanded in some instances to include references to additional products classified in other industries.

SIC Code, Industry Title, and Description

10 METAL MINING

101 Iron Ores

1011 Iron Ores.—Establishments primarily engaged in mining, beneficiating, or otherwise preparing iron ores and manganiferous ores valued chiefly for their iron content. The industry includes the production of sinter and other agglomerates in association with mining and beneficiating activities. Blast furnaces primarily engaged in producing pig iron from iron ore are classified as manufacturing plants in industry 3312, Blast Furnaces and Steel Mills. The production of sinter and other agglomerates in conjunction with blast furnace operations is also classified as manufacturing.

102 Copper Ores

1021 Copper Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing copper ores. This industry also includes establishments primarily engaged in the recovery of copper concentrates by precipitation and leaching of copper ore. Establishments primarily engaged in the recovery of refined copper by leaching copper concentrates are classified in Major Group 33, Primary Metal Industries.

103 Lead and Zinc Ores

1031 Lead and Zinc Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing lead ores, zinc ores, or lead-zinc ores.

104 Gold and Silver Ores

1042 Lode Gold.—Establishments primarily engaged in mining gold ores from lode deposits. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine or mill site.

1043 Placer Gold.—Establishments primarily engaged in recovery of gold from placer deposits by any method. This industry includes the production of bullion at the mine, mill, or dredge site.

1044 Silver Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing silver ores. The production of bullion at the mine or mill site is included.

105 Bauxite and Other Aluminum Ores

1051 Bauxite and Other Aluminum Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing bauxite and other aluminum ores. Associated activities such as drying, calcining, activating, and sintering are also included.

106 Ferroalloy Ores, Except Vanadium

1062 Manganese Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing manganese ores, such as pyrolusite, rhodochrosite, psilomelane, and manganite. The mining of manganiferous iron ores valued chiefly for their iron content is classified in industry 1011, Iron Ores.

1064 Tungsten Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing tungsten ores, such as ferberite, huebnerite, scheelite, and wolframite.

1069 Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified.—Establishments primarily engaged in mining, milling, or otherwise preparing ferroalloy ores, n.e.c., such as chromite, columbite, and nickel ore. Titanium ore, used sometimes for ferroalloying but principally for other purposes, is classified in industry 1093, Titanium Ores.

108 Metal Mining Services

1081 Metal Mining Services.—Establishments primarily engaged in metal mining services for others on a contract, fee, or other basis, such as removal of overburden, strip mining, prospect and test drilling, and mine exploration and development. Establishments primarily engaged in performing hauling services are excluded from this industry.

109 Miscellaneous Metal Ores

1092 Mercury Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing mercury ores. This industry includes the production of metallic mercury by furnacing or retorting at the mine site.

1093 Titanium Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing titanium ores.

1094 Uranium-Radium-Vanadium Ores.—Establishments primarily engaged in mining, milling, or otherwise preparing uranium-radium-vanadium ores.

1099 Metallic Minerals (Ores), Not Elsewhere Classified.—Establishments primarily engaged in mining, milling, or otherwise preparing miscellaneous metallic minerals (ores), not elsewhere classified, such as antimony, beryllium, germanium, palladium, tin, zirconium, and rare-earth ores.

11 ANTHRACITE MINING

111 Anthracite

1111 Anthracite.—Establishments primarily engaged in producing anthracite or in developing anthracite mines. All

- establishments in the United States that are classified in this industry are in Pennsylvania. This industry includes underground mines, stripping or culm-bank operations by owners or lessees, dredge operations, and coal preparation plants (breakers, washeries, and screening plants) whether or not operated in conjunction with the mines served.
- 1112 **Anthracite Mining Services.**—Establishments primarily engaged in overburden stripping and strip mining for fresh or culm-bank anthracite for others on a contract, fee, or other basis and other establishments primarily engaged in performing anthracite mining services, such as drilling, mine tunnelling, shaft sinking, and pumping or draining mines. The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.
- 12 **BITUMINOUS COAL AND LIGNITE MINING**
- 121 **Bituminous Coal and Lignite Mining**
- 1211 **Bituminous Coal.**—Establishments primarily engaged in producing bituminous coal or in developing bituminous coal mines. This industry includes underground mining, auger mining, strip mining, and coal cleaning, crushing, screening, and sizing plants whether or not operated in conjunction with the mines served.
- 1212 **Lignite.**—Establishments primarily engaged in producing lignite or in developing lignite mines.
- 1213 **Bituminous Coal and Lignite Mining Services.**—Establishments primarily engaged in overburden stripping and strip and auger mining of bituminous coal or lignite for others on a contract, fee, or other basis and other establishments primarily engaged in performing bituminous coal and lignite mining services, such as drilling, shaft sinking, and mine tunnelling. The production of coke is classified in industry 3312, Blast Furnaces and Steel Mills. The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.
- 13 **CRUDE PETROLEUM AND NATURAL GAS**
- 131 **Crude Petroleum and Natural Gas**
- 1311 **Crude Petroleum and Natural Gas.**—Establishments primarily engaged in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and the operation of separators, emulsion breakers, desilting equipment; and all other activities incident to making oil and gas marketable up to the point of shipment from the producing property. This industry also includes production of oil through the mining and extraction of oil from oil shale and oil sands. Production of natural gas liquids is classified in industry 1321, Natural Gas Liquids. Establishments primarily engaged in performing oil field services for operators on a contract, fee, or other basis are classified in Group 138, Oil and Gas Field Services. Pipe line transportation of petroleum, gasoline, and other petroleum products is classified in Major Group 46, and pipe line transportation of natural gas in industries 4922 and 4923. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29, Petroleum Refining and Related Industries.
- 132 **Natural Gas Liquids**
- 1321 **Natural Gas Liquids.**—Establishments primarily engaged in producing liquid hydrocarbons from oil and gas field gases. Establishments recovering liquefied petroleum gases incident to petroleum refining or to the manufacturing of chemicals are classified in Major Groups 28 or 29.
- 138 **Oil and Gas Field Services**
- 1381 **Drilling Oil and Gas Wells.**—Establishments primarily engaged in drilling wells for oil or gas for others on a contract, fee, or other basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.
- 1382 **Oil and Gas Exploration Services.**—Establishments primarily engaged in geophysical, geological, and other exploration work on a contract, fee, or other basis.
- 1389 **Oil and Gas Field Services, N.E.C.**—Establishments primarily engaged in performing oil and gas field services, not elsewhere classified, for others on a contract, fee, or other basis, such as excavating slush pits and cellars; grading and building foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.
- 14 **MINING AND QUARRYING OF NONMETALLIC MINERALS, EXCEPT FUELS**
- 141 **Dimension Stone**
- 1411 **Dimension Stone.**—Establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments primarily engaged in producing rough blocks and slabs. Establishments primarily engaged in mining or quarrying and shaping grindstones, pulpstones, millstones, burrstones, and sharpening stones are classified in industry 1497; and those mining or quarrying dimension soapstone in industry 1496. Establishments primarily engaged in dressing (shaping, polishing, or otherwise finishing) rough blocks and slabs are classified in industry 3281, Cut Stone and Stone Products. Nepheline syenite operations are classified in industry 1459.

142 Crushed and Broken Stone

1422 Crushed and Broken Limestone.—Establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa. Establishments primarily engaged in mining or preparing bituminous limestone and sandstone are classified in industry 1494, Native Asphalt and Bitumens.

1423 Crushed and Broken Granite.—Establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.

1424 Crushed and Broken Stone, N.E.C.—Establishments primarily engaged in mining or quarrying crushed and broken stone, n.e.c., such as slate (including slate granules), marble, trap rock (basalt, diabase, gabbro, and related rocks), sandstone (including quartzite and gneiss), and various light-colored volcanic rocks, mica schist, and mixed boulders.

144 Sand and Gravel

1442 Construction Sand and Gravel.—Establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, and otherwise preparing sand and gravel for construction uses.

1446 Industrial Sand.—Establishments primarily engaged in operating sand pits and dredges, and in washing, screening, and otherwise preparing sand for uses other than construction, such as glass making, molding, and abrasives.

145 Clay, Ceramic, and Refractory Minerals

1452 Bentonite.—Establishments primarily engaged in mining, milling, or otherwise preparing bentonite. Establishments engaged in preparing bentonite which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

1453 Fire Clay.—Establishments primarily engaged in mining, milling, or otherwise preparing fire clay, including stoneware clay and diaspore. For mines producing fire clay as the principal product as part of an establishment manufacturing cement or clay, refractory, or pottery products, the entire establishment is classified in manufacturing. These operations were included in the following manufacturing industries: 3241, Cement, Hydraulic; 3251, Brick and Structural Tile; 3255, Clay Refractories; and 3259, Structural Clay Products, N.E.C.

1454 Fuller's Earth.—Establishments primarily engaged in mining, milling, or otherwise preparing fuller's earth.

1455 Kaolin and Ball Clay.—Establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

1456 Feldspar.—Establishments primarily engaged in mining, milling, or otherwise preparing feldspar. Establishments engaged in grinding feldspar which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

1459 Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified.—Establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic, or refractory minerals, not elsewhere classified, such as common clay and shale, andalusite, aplite, brucite, dumortierite, kyanite, laterite, magnesite, olivine, pinite, sillimanite, and topaz (nongem). Establishments producing common clay and shale in conjunction with the manufacture of structural clay products are classified in Major Group 32, Stone, Clay, and Glass Products. Such combinations of mining and manufacturing establishments were included in the following manufacturing industries: 3241, Cement, Hydraulic; 3251, Brick and Structural Tile; 3253, Ceramic Wall and Floor Tile; 3255, Clay Refractories; and 3259, Structural Clay Products, N.E.C.

147 Chemical and Fertilizer Mineral Mining

1472 Barite.—Establishments primarily engaged in mining, milling, grinding, or otherwise preparing crude barite. Establishments engaged in grinding barite which do not include a mine are classified in manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

1473 Fluorspar.—Establishments primarily engaged in mining, milling, or otherwise preparing fluorspar.

1474 Potash, Soda, and Borate Minerals.—Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt). Products of the industry include potash salts, sodium borates (borax, kernite, ulexite), sodium carbonates (soda ash, trona), sodium sulfates (principally Glauber's salt), and colemanite, a calcium borate. Dry-lake brine operations are included in this industry as well as establishments engaged in producing the specified minerals from underground and open-pit mines.

1475 Phosphate Rock.—Establishments primarily engaged in mining, milling, drying, or otherwise preparing phosphate rock, including apatite. Establishments primarily engaged in the production of phosphoric acid, superphosphates, or other manufactured phosphate compounds or chemicals are classified in Major Group 28, Chemicals and Allied Products.

1476 Rock Salt.—Establishments primarily engaged in mining, crushing, and screening rock salt. Establishments primarily engaged in manufacturing edible salt from rock salt and from natural or artificial brines are classified in manufacturing industry 2899, Chemicals and Chemical Preparations, N.E.C.

1477 Sulfur.—Establishments primarily engaged in mining native sulfur, including the extraction of native sulfur

at well operations and mining and beneficiating sulfur ore. The mining of pyrites for sulfur is included in industry 1479, Chemical and Fertilizer Mineral Mining, N.E.C. The recovery of sulfur from beneficiation of natural gas is included in manufacturing industry 2819, Industrial Inorganic Chemicals, N.E.C.

1479 Chemical and Fertilizer Mineral Mining, N.E.C.—Establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, n.e.c., such as arsenic minerals, guano, lithium minerals, mineral pigments, pyrites, and strontium minerals.

148 Nonmetallic Minerals (Except Fuels) Services

1481 Nonmetallic Minerals (Except Fuels) Services.—Establishments primarily engaged in performing non-metallic minerals (except fuels) services for others on a contract, fee, or other basis. The principal services performed in this industry are prospect, test, and other drilling; overburden stripping and strip mining; sinking mine shafts and driving mine tunnels; and exploration work. Establishments primarily engaged in performing hauling services are excluded from this industry.

149 Miscellaneous Nonmetallic Minerals, Except Fuels

1492 Gypsum.—Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing gypsum. Calcining activities are excluded. However, if a gypsum mine is part of an establishment producing gypsum products, the entire establishment is classified in the manufacturing industry 3275, Gypsum Products.

1493 Mica.—Establishments primarily engaged in mining, milling, or otherwise preparing mica. Establishments engaged in grinding mica which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

1494 Native Asphalt and Bitumens.—Establishments primarily engaged in mining, milling, or otherwise preparing native asphalt and bitumens, including gilsonite, wurtzilite, grahamite, and ozokerite. The mining of bituminous limestone and bituminous sandstone is also included.

1495 Pumice and Pumicite.—Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing pumice and pumicite (volcanic ash).

1496 Talc, Soapstone, and Pyrophyllite.—Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing talc, soapstone, or pyrophyllite. Dimension soapstone is included in this industry. Establishments engaged in grinding talc, soapstone, or pyrophyllite which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

1497 Natural Abrasives, Except Sand.—Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing natural abrasives, such as corundum, industrial diamonds, emery, garnet, and tripoli. This industry includes the shaping of natural abrasive stones at the quarry. Establishments primarily engaged in the production of blast, grinding, or polishing sand are classified in industry 1446, Industrial Sand, and those primarily engaged in the production of diatomite in industry 1499, Miscellaneous Nonmetallic Minerals, N.E.C.

1498 Peat.—Establishments primarily engaged in mining peat, and in the preparation of peat.

1499 Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified.—Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing miscellaneous nonmetallic minerals, not elsewhere classified, such as asbestos, diatomite, natural gem stones, graphite, greensand, perlite, Iceland spar (optical grade calcite), and vermiculite.

Appendix C

AUTHORITY FOR CENSUS: TITLE 13, UNITED STATES CODE

(Codification of August 1954 amended by Acts of August 1957, September 1960, June and October 1962, and August 1964)

Collection and publication: Five-year periods (131)

The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses... in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof.

Geographic scope of censuses (191a)

Each of the censuses authorized by this chapter (other than censuses of population) shall include each State, the District of Columbia, Alaska, Hawaii, the Virgin Islands, Guam, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty. Censuses of population shall include all geographic areas referred to in the preceding sentence. Inclusion of other areas over which the United States exercises jurisdiction or control shall be subject to the concurrence of the Secretary of State.

Failure to answer questions affecting companies, businesses, religious bodies, and other organizations: False answers (224)

Whoever, being the owner, official, agent, person in charge, or assistant to the person in charge, of any company, business, institution, establishment, religious body, or organization of any nature whatsoever, neglects or refuses, when requested by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof, whether such request be made by registered mail, by certified mail, by telegraph, by visiting representative, or by one or more of these methods, to answer completely and correctly to the best of his knowledge all questions relating to his company, business, institution, establishment, religious body, or other organization, or to records or statistics in his official custody, contained on any census or other schedule prepared and submitted to him under the authority of this title, shall be fined not more than \$500 or imprisoned not more than sixty days, or both; and if he willfully gives a false answer to any such question, he shall be fined not more than \$10,000 or imprisoned not more than one year, or both.

Appendix D

ALPHABETIC INDEX OF PRODUCTS AND SERVICES OF MINERAL ESTABLISHMENTS

This index provides an alphabetic list of products and services, classified in the mineral industries, for which data are shown in table 6's of the industry chapters. The references in this index are to items for which statistics are either shown separately in that table or are included as part of a group of products or services. The index also includes products and services referred to in the industry descriptions in the text of the separate industry chapters.

References to products may be found in various tables in the industry chapters; however, more detailed product information is typically given in table 6. The industry codes are based on the 1967 edition of the Standard Industrial Classification (SIC) Manual published by the Bureau of the Budget.

It should also be noted that table 7 of chapter 1, General Summary, includes a comparison of quantity and value of selected mineral products as published in the 1967 Census of Mineral Industries and as published by the Bureau of Mines.

A

Abandoning of wells for oil or gas field operations.....	13898
Abrasives, natural (except quartz and sand).....	14970
Acidizing and other chemical treatment of wells, except hydraulic fracturing.....	13898
Agate, crude.....	14991
Agate, prepared.....	14992
Agglomerates, iron.....	10112
Alabaster, crude.....	14921
Alabaster, prepared.....	14922
Alum, natural, crude.....	14741
Alum, natural, prepared.....	14742
Aluminum ores, crude.....	10511
Aluminum ores, prepared.....	10512
Amblygonite.....	14799
Amethyst, crude.....	14991
Amethyst, prepared.....	14992
Andalusite, crude.....	14591
Andalusite, prepared.....	14592
Anthracite, crushed.....	11112
Anthracite, mechanically cleaned.....	11112
Anthracite mining services.....	11128
Anthracite, prepared.....	11112
Anthracite, raw.....	11111
Anthracite, raw, shipments other than to coal preparation plants.....	11111
Anthracite, raw, shipped to coal preparation plants.....	11111
Anthracite, screened.....	11112
Anthracite, sized.....	11112
Anthracite, stripping overburden services.....	11128
Antimony concentrates.....	10992
Antimony ores, crude.....	10991
Apatite, crude.....	14751
Apatite, prepared.....	14752
Aplite, crude.....	14591
Aplite, prepared.....	14592
Argillite, crude, dimension stone.....	14191
Arsenic minerals.....	14799
Asbestos, crude.....	14991
Asbestos, prepared.....	14992
Ash, volcanic.....	14950
Asphalt, native.....	14940
Auger mining services, bituminous coal.....	12138
Auger mining services, lignite.....	12138

B

Bailing out wells, oil and gas field.....	13898
Ball clay, crude.....	14551
Ball clay, prepared.....	14552
Barite, crude.....	14721
Barite, crushed.....	14722
Barite flotation concentrates.....	14722
Barite, ground.....	14722
Barite, prepared.....	14722
Barium ores, crude.....	14721
Basalt, crude, dimension stone.....	14191
Basalt, crushed and broken.....	14292
Bastnaesite, crude.....	10991
Bastnaesite, prepared.....	10992
Bauxite, calcined or activated.....	10512
Bauxite, crude, undried.....	10511
Bauxite, crude, undried, for direct shipping.....	10511
Bauxite, dried.....	10512
Bentonite, crude.....	14521
Bentonite, prepared.....	14522
Beryllium concentrates.....	10992
Beryllium ores, crude.....	10991
Bitumens, native.....	14940
Bituminous coal, crushed.....	12112
Bituminous coal, mechanically cleaned.....	12112
Bituminous coal, prepared.....	12112
Bituminous coal, raw.....	12111
Bituminous coal, raw, shipments other than to coal preparation plants.....	12111
Bituminous coal, raw, shipped to coal preparation plants.....	12111
Bituminous coal, screened.....	12112
Bituminous coal, sized.....	12112
Bituminous limestone.....	14940
Bituminous sandstone.....	14940
Blasting services for anthracite mining.....	11128
Blasting services for bituminous coal mining.....	12138
Blasting services for lignite mining.....	12138
Blasting services for metal mining.....	10818

Blasting services for nonmetallic minerals (except fuels)

mining.....	14818
Bleaching clay, crude.....	14551
Bleaching clay, prepared.....	14552
Bluestone, crude, dimension.....	14191
Board roads, building of, for oil or gas field operations.....	13898
Borate compounds and minerals, prepared.....	14744
Borax.....	14744
Boron compounds.....	14744
Boulders (mixed), crushed and broken.....	14292
Breakers, anthracite.....	11112
Brimstone.....	14770
Briquets, iron.....	10112
Brown coal, prepared.....	12112
Brown coal, raw.....	12111
Brown ore, crude.....	10111
Brown ore, treated.....	10112
Brucite.....	14593
Building board roads for oil or gas field operations.....	13898
Building, erecting, repairing and dismantling rigs and derricks for oil or gas field operations.....	13898
Building well foundations at well locations for oil or gas field operations.....	13898
Bullion, gold, produced at mine site.....	10423
Burley fire clay, crude.....	14531
Burley fire clay, prepared.....	14532
Burrstones, natural.....	14970
Butane, natural.....	13212

C

Calamine, crude.....	10331
Calamine, prepared.....	10332
Calaverite, crude.....	10421
Calaverite, prepared.....	10422
Calcareous tufa, crude, dimension.....	14121
Calcareous tufa, crushed and broken.....	14222
Calcined phosphate rock.....	14752
Calcite, optical grade, crude.....	14991
Calcite, optical grade, prepared.....	14992
Canal dredging for oil or gas field operations.....	13898
Carbonates, sodium.....	14743
Carnotite, crude.....	10941
Carnotite, prepared.....	10942
Catlinite, crude.....	14991
Catlinite, prepared.....	14992
Celestite.....	14799
Cement rock, crushed and broken.....	14222
Cementing wells for oil or gas field operations.....	13898
Cerium concentrates.....	10992
Cerium ores, crude.....	10991
Cerrusite, crude.....	10321
Cerrusite, prepared.....	10322
Chalcocite, crude.....	10211
Chalcocite, prepared.....	10212
Chalcocopyrite, crude.....	10211
Chalcocopyrite, prepared.....	10212
Chalk, crushed and broken.....	14222
Chasers.....	14970
Chemical treatment of wells for oil or gas field operations.....	13898
China clay, crude.....	14551
China clay, prepared.....	14552
Chromite, concentrates or prepared.....	10692
Chromite, crude.....	10691
Chromium concentrates.....	10692
Chromium ores, crude.....	10691
Cinnabar, crude.....	10921
Cinnabar, prepared.....	10923
Clay ball, crude.....	14551
Clay ball, prepared.....	14552
Clay, bleaching, crude.....	14551
Clay, bleaching, prepared.....	14552
Clay, ceramic and refractory minerals, crude.....	14591
Clay, ceramic and refractory minerals, prepared.....	14592
Clay, china, crude.....	14551
Clay, china, prepared.....	14552
Clay, common, crude.....	14591
Clay, common, prepared.....	14592
Clay, fire, crude.....	14531
Clay, fire, prepared.....	14532
Clay, paper, crude.....	14551
Clay, paper, prepared.....	14552
Clay, slip, crude.....	14551
Clay, slip, prepared.....	14552
Clays, natural, bleaching, crude.....	14551

Cleaning lease tanks for oil or gas field operations.....	13898
Cleaning out, including steam cleaning, bailing out, or swabbing wells for oil or gas field operations.....	13898
Cleaning plants, bituminous coal.....	12112
Clearing locations for oil or gas field operations.....	13898
Cobalt ores, concentrates.....	10692
Cobalt ores, crude.....	10691
Colemanite.....	14744
Columbite, crude.....	10691
Columbite, prepared.....	10692
Columbium ores, crude.....	10691

Columbium ores, prepared.....	10692
Common clay, crude.....	14591
Common clay, prepared.....	14592
Condensate, cycle.....	13212
Construction of oil or gas pipe lines on lease; construction of gathering lines to point where distribution company takes over.....	13898
Construction sand, crude.....	14421
Construction sand, treated.....	14422
Construction work for oil or gas field operations.....	13898
Contract services, general, for oil or gas field operations...	13898

Copper concentrates.....	10212
Copper ore, crude.....	10211
Copper ore, crude, and old tailings shipped to mills for treatment.....	10211
Copper ore, crude, and old tailings shipped to smelters.....	10211
Copper-water precipitates, including precipitates from ore leached in place.....	10213
Core cutting in oil or gas wells.....	13898
Core drilling, oil or gas field exploration services.....	13828
Cornwall stone, crude.....	14561
Corundum.....	14970
Crane work-on lease, for oil or gas field operations.....	13898
Crude oil.....	13120

Crude petroleum.....	13120
Cryolite, crude.....	14991
Cryolite, prepared.....	14992
Culm bank recovery, for anthracite (services).....	11128
Cuprite, crude.....	10211
Cuprite, prepared.....	10212
Cutting casing, tubes or rods for oil or gas field operations.....	13898
Cutting cores in oil or gas wells.....	13898
Cyanite, crude.....	14591
Cyanite, prepared.....	14592
Cycle condensate.....	13212

D

Derrick building, repairing, and dismantling: oil or gas wells.....	13898
Diabase, crude, dimension stone.....	14191
Diabase, crushed and broken.....	14292
Diamonds, industrial.....	14970
Diaspore, crude.....	14531
Diaspore, prepared.....	14532
Diatomaceous earth, crude.....	14991
Diatomaceous earth, prepared.....	14992
Diatomite, crude.....	14991
Diatomite, prepared.....	14992

Dimension stone, rough, other than granite or limestone.....	14191
Diorite, crude, dimension stone.....	14131
Diorite, crushed and broken.....	14232
Directional drilling for oil or gas field operations.....	13818
Dirt work in oil or gas fields.....	13898
Disposal systems, salt water, for oil or gas field operations.....	13898
Dolomite, crude, dimension stone.....	14121
Dolomite, crushed and broken.....	14222
Dolomitic marble, crude, dimension stone.....	14191
Dolomitic marble, crushed and broken.....	14292

Dragstones.....	14970
Dredging canals for oil or gas field operations.....	13898
Dried phosphate rock.....	14752
Drill stem testing in oil, gas, dry and service well drilling.....	13898
Drilling, core, oil or gas field exploration services.....	13828
Drilling, directional, oil or gas field.....	13818
Drilling dry holes for gas and oil field.....	13818
Drilling gas wells.....	13818
Drilling oil wells.....	13818
Drilling rat holes and mouse holes for oil or gas field operations.....	13898
Drilling service on a contract, fee, or other basis for nonmetallic minerals (except fuels) mining.....	14818
Drilling service wells for oil or gas field operations.....	13818

Drilling services for anthracite mining.....	11128
Drilling services for bituminous coal mining.....	12138
Drilling services for lignite mining.....	12138
Drilling services for metal mining.....	10818
Drilling, shot hole, oil or gas field exploration services....	13828
Drilling sites, preparation of, for oil or gas field operations.....	13898
Drilling, stratigraphic oil or gas field exploration services.....	13828
Drilling water intake wells, oil or gas field.....	13818
Drilling wells for gas or oil field operations.....	13818
Driving keyways for oil or gas field operations.....	13898
Dumortierite, crude.....	14591
Dumortierite, prepared.....	14592

E

Earth, diatomaceous, crude.....	14991
Earth, diatomaceous, prepared.....	14992
Earth, fuller's (including all natural bleaching clays).....	14540
Emery.....	14970
Engine installing for oil or gas field operations.....	13898
Erecting, cleaning, repairing, and dismantling lease tanks for oil or gas field operations.....	13898
Ethane, natural gas liquid.....	13212

Excavating mud pits, slush pits, and cellars for oil or gas field operations.....	13898
Exploration services for anthracite mining.....	11128
Exploration services for bituminous coal mining.....	12138
Exploration services for lignite mining.....	12138
Exploration services for metal mining.....	10818
Exploration services for nonmetallic minerals (except fuels) mining.....	14818

F

Feldspar, crude.....	14561
Feldspar, crushed or ground.....	14562
Feldspar, prepared.....	14562
Ferberite concentrates.....	10642
Ferberite crude ores.....	10641
Ferroalloy ores, except vanadium, crude.....	10691
Fertilizer minerals, natural.....	14799
Fire clay, crude (including plastic, flint, diaspore, burley and stoneware).....	14531
Fire clay, plastic, crude.....	14531
Fire clay, plastic, prepared.....	14532
Fishing for tools (for oil or gas field operations).....	13898

Flagstones, crude, dimension.....	14191
Flint, fire clay, crude.....	14531
Flint, fire clay, prepared.....	14532
Flooding and water injection for oil or gas field operations..	13898
Fluorite, crude.....	14731
Fluorspar, crude.....	14731
Fluorspar, crushed.....	14732
Fluorspar flotation concentrates.....	14732
Fluorspar, ground.....	14732
Fluorspar, prepared.....	14732
Fuller's earth.....	14540

G

Gabbro, crude, dimension stone.....	14191
Gabbro, crushed and broken stone.....	14292
Galena, crude.....	10321
Galena, prepared.....	10322
Ganister, crushed and broken stone.....	14292
Garnet.....	14970
Gas, liquefied petroleum.....	13212
Gas,natural.....	13130
Gas, natural, liquid.....	13212
Gas or oil field geological exploration.....	13828
Gas or oil field geophysical exploration.....	13828
Gas residue.....	13213

Gases, petroleum, liquefied.....	13212
Gasoline,natural.....	13212
Gem stones, natural, crude.....	14991
Gem stones, natural, prepared.....	14992
General oil or gas field contracting.....	13898
Geological exploration, oil or gas field.....	13828
Geophysical exploration, oil or gas field.....	13828
Geophysical surveying services for anthracite mining.....	11128
Geophysical surveying services for bituminous coal mining....	12138
Geophysical surveying services for lignite mining.....	12138
Geophysical surveying services for metal mining.....	10818

Geophysical surveying services for the mining of nonmetallic minerals (except fuels).....	14818
Gilsonite.....	14940
Glass sand for melting only.....	14430
Glauber's salt.....	14743
Gneiss, crude, dimension.....	14131
Gneiss, crushed and broken.....	14232
Gold concentrates.....	10422
Gold mill bullion and precipitates recovered by amalgamation.....	10423
Gold mill bullion and precipitates recovered by cyanidation.....	10423
Gold ore, lode, crude.....	10421
Gold ore, lode, crude, and old tailings shipped to mills for treatment.....	10421
Gold ore, lode, crude, and old tailings shipped to smelters.....	10421
Gold, placer.....	10433
Grading well foundations at well locations for oil or gas field operations.....	13898
Grahamite.....	14940
Granite, crude, dimension stone.....	14131
Granite, crushed and broken.....	14232
Granules, slate.....	14292
Graphite, crude.....	14991
Graphite, prepared.....	14992
Gravel, crude.....	14421
Gravel, prepared.....	14422
Gravel, run of pit or bank.....	14421
Gravel, washed and screened.....	14422
Greensand, crude.....	14991
Greensand, prepared.....	14992
Greenstone, crude, dimension.....	14191
Grinding pebbles.....	14970
Grindstones.....	14970
Grits, crushed and broken stone.....	14292
Guano.....	14799
Gypsite, crude.....	14921
Gypsite, prepared.....	14922
Gypsum, crude.....	14921
Gypsum, crushed, ground, screened or dried.....	14922

H

Hematite, crude.....	10111
Hematite, prepared.....	10112
Hones.....	14970
Huebnerite, crude.....	10641
Huebnerite, prepared.....	10642
Humus, peat.....	14980
Hydraulic fracturing.....	13898

I

Iceland spar, crude.....	14991
Iceland spar, prepared.....	14992
Ilmenite concentrates.....	10932
Ilmenite ore, crude.....	10931
Industrial sand.....	14450
Installing production equipment for oil or gas field operations.....	13898
Iridium.....	10993
Iron briquets, agglomerates.....	10112
Iron concentrates.....	10112
Iron ore, crude.....	10111
Iron ore, crude, beneficiating-grade and/or agglomeration-grade.....	10111
Iron ore, crude, for direct shipping.....	10111
Iron ore, treated.....	10112
Iron pellets, agglomerates.....	10112
Iron sinter, agglomerates.....	10112
Isopentane, natural gas liquid.....	13212

J

Jade, crude.....	14991
Jade, prepared.....	14992

K

Kaolin and ball clay, crude.....	14551
Kaolin and ball clay, prepared.....	14552
Kernite.....	14744
Keyway driving for oil or gas field operations.....	13898
Kyanite, crude.....	14591
Kyanite, prepared.....	14592

L

Laterite, crude.....	14591
Laterite, prepared.....	14592
Lead concentrates.....	10322
Lead ore, crude.....	10321
Lead ore, crude, and old tailings shipped to mills for treatment.....	10321
Lead ore, crude, and old tailings shipped to smelters.....	10321
Lease condensate.....	13130
Lease maintenance for oil or gas field operations.....	13898
Lease tanks, oil or gas field, erecting, cleaning and repairing.....	13898
Lepidolite.....	14799
Leveling for oil or gas field operations.....	13898
Lignite, crushed.....	12122
Lignite, mechanically cleaned.....	12122
Lignite, prepared.....	12122
Lignite, raw.....	12121
Lignite, raw, shipped to coal preparation plants.....	12121
Lignite, screened.....	12122
Lignite, sized.....	12122
Limestone, bituminous.....	14940
Limestone, crude, dimension stone.....	14121
Limestone, crushed and broken.....	14222
Limonite, crude.....	10111
Limonite, prepared.....	10112
Liners, tube-mill.....	14970
Liquefied petroleum gases.....	13212
Liquids, natural gas.....	13212
Lithium minerals.....	14799
Location clearing for oil or gas field operations.....	13898
Lode gold concentrates.....	10422
Lode gold, crude.....	10421
Lode gold, mill bullion.....	10423
Logging wells, gas or oil field.....	13898

M

Magnesite.....	14593
Magnetite, crude.....	10111
Magnetite, prepared.....	10112
Manganese concentrates.....	10622
Manganese and manganiferous ores, crude.....	10621
Manganese nodules.....	10622
Manganese ore, crude.....	10621
Manganese ore, crude, beneficiating-grade and agglomeration grade.....	10621
Manganese ore, crude, direct shipping.....	10621
Manganese ores, treated.....	10622
Manganese sinter.....	10622
Manganiferous ores (valued chiefly for iron).....	10111
Manganite, crude.....	10621
Manganite, prepared.....	10622
Marble, crude, dimension stone.....	14191
Marble, including dolomitic marble, crushed and broken.....	14292
Marcasite.....	14799
Marl, crushed and broken.....	14222
Meerschau, crude.....	14991
Meerschau, prepared.....	14992
Mercury ore, crude.....	10921
Mercury ore, metal.....	10923
Mica, crude.....	14931
Mica, ground.....	14932
Mica, hand-cobbed.....	14931
Mica, prepared.....	14932
Mica schist, crude, dimension.....	14191
Mica schist, crushed and broken.....	14292
Mica, scrap (flake).....	14931
Mica, sheet.....	14931
Microlite, crude.....	10991
Microlite, prepared.....	10992
Millstones.....	14970
Mine shaft sinking services for anthracite mining.....	11128
Mine shaft sinking services for bituminous coal mining.....	12138
Mine shaft sinking services for lignite mining.....	12138
Mine shaft sinking services for metal mining.....	10818
Mine shaft sinking services for nonmetallic minerals (except fuels)mining.....	14818
Mine tunneling services for anthracite mining.....	11128
Mine tunneling services for bituminous coal mining.....	12138
Mine tunneling services for lignite mining.....	12138
Mine tunneling services for metal mining.....	10818
Mine tunneling services for nonmetallic minerals (except fuels) mining.....	14818

Mineral pigments, natural.....	14799
Molding sand.....	14440
Molybdenite, crude.....	10691
Molybdenite, prepared.....	10692
Molybdenum concentrates.....	10692
Molybdenum ores, crude.....	10691
Molybdite, crude.....	10691
Molybdite, prepared.....	10692
Monazite, crude.....	10991
Monazite, prepared.....	10992
Mouse hole and rat hole drilling for oil or gas field operations.....	13898
Mud logging for oil or gas field operations.....	13898
Mud pit excavating for oil or gas field operations.....	13898
Muscovite, crude.....	14931
Muscovite, prepared.....	14932

N

Native asphalt.....	14940
Natural abrasives (except quartz).....	14970
Natural gas.....	13130
Natural gas liquids.....	13212
Natural gas, offshore production.....	13130
Natural gasoline.....	13212
Nepheline syenite, crude.....	14591
Nepheline syenite, prepared.....	14592
Nickel concentrates.....	10692
Nickel ores, crude.....	10691

O

Ocher.....	14799
Offshore crude petroleum production.....	13120
Offshore natural gas production.....	13130
Oil, crude.....	13120
Oil or gas field exploration, including geological and geophysical.....	13828
Oil line drip, natural gas liquid.....	13212
Oilstones.....	14970
Olivine, crude.....	14591
Olivine, prepared.....	14592
Onyx marble, crude, dimension.....	14191

Onyx marble, crushed and broken.....	14292
Optical grade calcite, crude.....	14991
Optical grade calcite, prepared.....	14992
Osmium.....	10993
Overburden stripping services for anthracite mining.....	11128
Overburden stripping services for bituminous coal mining.....	12138
Overburden stripping services for lignite mining.....	12138
Overburden stripping services for metal mining.....	10818
Overburden stripping services for nonmetallic minerals (except fuels) mining.....	14818
Ozokerite.....	14940

P

Palladium.....	10993
Paper clay, crude.....	14551
Paper clay, prepared.....	14552
Paraffin services for oil or gas field operations.....	13898
Pavers.....	14970
Peat.....	14980
Pebbles, grinding.....	14970
Pegmatite (feldspar), crude.....	14561
Pennsylvania anthracite, raw.....	11111
Pennsylvania anthracite, prepared.....	11112
Perforating well casing, gas or oil field services.....	13898
Perlite, crude or prepared.....	14992
Petroleum, crude.....	13120
Petroleum, crude, offshore production.....	13120
Petroleum gases, liquefied.....	13212
Phlogopite, crude.....	14931
Phlogopite, prepared.....	14932
Phosphate rock, crude (ore or matrix).....	14751

Phosphate rock, dried, calcined or sintered.....	14752
Phosphate rock, washed or concentrated.....	14752
Phosphate rock, washed or concentrated: shipped.....	14752
Pigments, mineral, natural.....	14799
Pinite, crude.....	14591
Pinite, prepared.....	14592
Pipe line construction on lease; construction of gathering lines to point where distribution company takes over (oil or gas only).....	13898

Pipe testing for oil or gas field operations.....	13898
Pipestones, crude.....	14991
Pitchblende, crude.....	10941
Pitchblende, prepared.....	10942
Placer gold.....	10433
Placer silver.....	10443
Plastic fire clay, crude.....	14531
Plastic fire clay, prepared.....	14532
Platinum.....	10993
Platinum-group metals.....	10993

Plugging wells, oil or gas field services.....	13898
Potassium bromide.....	14742
Potassium salts, crude.....	14741
Potassium salts, processed or refined.....	14742
Propane (natural).....	13212
Precious stones, crude.....	14991
Precious stones, prepared.....	14992
Preparation of drilling sites for oil or gas field operations.....	13898
Prospect and test drilling services for anthracite mining.....	11128

Prospect and test drilling services for bituminous coal mining.....	12138
Prospect and test drilling services for lignite mining.....	12138
Prospect and test drilling services for metal mining.....	10818
Prospect and test drilling services for nonmetallic minerals (except fuels) mining.....	14818
Psilomelane, crude.....	10621
Pulling casing, tubes, or rods for oil or gas field operations.....	13898
Pulpstones, natural.....	14970
Pumice.....	14950
Pumicite.....	14950
Pumps installed for oil or gas field operations.....	13898

Pyrite concentrates.....	14790
Pyrites, fines.....	14790
Pyrites, lump ore.....	14790
Pyrolusite, crude.....	10621
Pyrolusite, prepared.....	10622
Pyrophyllite, crude.....	14961
Pyrophyllite flotation concentrates.....	14962
Pyrophyllite, prepared.....	14962
Pyrophyllite, sawed, crushed or ground.....	14962
Pyrrhotite.....	14799

Q

Quartz crystal (pure), crude.....	14991
Quartz crystal (pure), prepared.....	14992
Quartzite, crude, dimension.....	14191
Quartzite, crushed and broken.....	14292
Quartzite, ganister, crushed and broken.....	14292
Quicksilver (metal), prepared at mine site.....	10923
Quicksilver ore.....	10921

R

Radium ores.....	10941
Rare-earth metal concentrates.....	10992
Rare-earth metal ores, crude.....	10991
Rat hole and mouse hole drilling for oil or gas field operations.....	13898
Raw anthracite for shipments.....	11111
Reconditioning wells for oil and gas field operations.....	13818
Remedial work, subsurface, for oil or gas field operations.....	13818
Residue gas.....	13213
Reworking wells, oil or gas field operations.....	13818

Rhodium.....	10993
Rhodochrosite, crude.....	10621
Rhodochrosite, prepared.....	10622
Rig building, repairing and dismantling oil or gas wells.....	13898
Rig skidding, for oil or gas field operations.....	13898
Rigs and derricks, built, erected, repaired and dismantled for oil or gas field operations.....	13898
Riprap, granite.....	14232
Riprap, limestone.....	14222
Riprap, miscellaneous stone (except limestone and granite)....	14292

Roads, board, building of, for oil or gas field operations....	13898
Rock salt (sodium chloride).....	14760
Rock, volcanic, light colored, crushed and broken.....	14292
Rocks, volcanic, light colored, crude, dimension.....	14191
Rolling pipe for oil or gas field operations.....	13898
Roscoelite, crude.....	10941
Roscoelite, prepared.....	10942
Roustabout work for oil or gas field operations.....	13898
Rubber clay, crude.....	14551
Rubber clay, prepared.....	14552

Rubbing stones.....	14970
Rubble, except limestone and granite.....	14191
Rubble, granite.....	14131
Rubble, limestone.....	14121
Ruby, crude.....	14991
Ruby, prepared.....	14992
Running, cutting and pulling casing, tubes or rods for oil or gas field operations.....	13898
Ruthenium.....	10993
Rutile concentrates.....	10932
Rutile ore, crude.....	10931
S	
Salt, common.....	14760
Salt (rock), sodium chloride.....	14760
Salt water disposal systems, for oil or gas field operations..	13898
Sand, blast.....	14450
Sand blasting pipe lines on lease for oil or gas field operations.....	13898
Sand, common, crude.....	14421
Sand, common, prepared.....	14422
Sand, construction, prepared.....	14422
Sand, construction, run of pit or bank.....	14421
Sand, construction, screened.....	14422
Sand, construction, washed, screened, ground, or prepared....	14422
Sand, engine.....	14450
Sand, filtration.....	14450
Sand, glass, for melting only.....	14430
Sand, grinding.....	14450
Sand, industrial.....	14450
Sand, molding.....	14440
Sand, oil.....	14450
Sandstone, bituminous.....	14940
Sandstone, crude, dimension.....	14191
Sandstone, crushed and broken.....	14292
Sapphire, crude.....	14991
Sapphire, prepared.....	14992
Scheelite, crude.....	10641
Scheelite, prepared.....	10642
Schist, mica, crude, dimension.....	14191
Schist, mica, crushed and broken.....	14292
Scoria.....	14950
Scythestones.....	14970
Seismograph surveys for oil or gas field operations.....	13828
Selenite, crude.....	14921
Selenite, prepared.....	14922
Semianthracite, prepared (outside of Pennsylvania).....	12112
Semianthracite, prepared (Pennsylvania)....	11112
Semianthracite, raw (outside of Pennsylvania).....	12111
Semianthracite, raw (Pennsylvania).....	11111
Semiprecious stones, crude.....	14991
Semiprecious stones, prepared.....	14992
Serpentine, crude, dimension stone.....	14191
Serpentine, crushed and broken stone.....	14292
Servicing oil or gas wells.....	13898
Shale, crude.....	14591
Shale, prepared.....	14592
Shell mining.....	14992
Shooting wells for oil or gas field operations.....	13898
Shot hole drilling, oil and gas field services.....	13828
Siderite (carbonate), crude.....	10111
Siderite concentrates.....	10112
Sienna.....	14799
Silica (from sand).....	14430
Sillimanite, crude.....	14591
Sillimanite, prepared.....	14592
Silver concentrates.....	10442
Silver mill bullion and precipitates recovered by amalgamation	10443
Silver mill bullion and precipitates recovered by cyanidation.	10443
Silver ore, crude.....	10441
Silver ore, crude, and old tailings shipped to mills for treatment.....	10441
Silver ore, crude, and old tailings shipped to smelters.....	10441
Silver, placer.....	10443
Sintered iron.....	10112
Sintered phosphate rock.....	14752
Skidding of rigs for oil or gas field operations.....	13898
Slate, crude, dimension stone.....	14191
Slate, crushed and broken.....	14292
Slate granules, crushed and broken.....	14292
Slip clay, crude.....	14551
Slip clay, prepared.....	14552
Smithsonite, crude.....	10331

Smithsonite, prepared.....	10332
Soapstone, crude.....	14961
Soapstone, crushed, ground or sawed.....	14962
Soapstone flotation concentrates.....	14962
Soapstone, prepared.....	14962
Soda ash, natural.....	14743
Sodium borates.....	14744
Sodium carbonates, natural.....	14743
Sodium chloride (rock salt).....	14760
Sodium sulfate.....	14743
Spar, Iceland, crude.....	14991
Spar, Iceland, prepared.....	14992
Sphalerite, crude.....	10331
Sphalerite, prepared.....	10332
Spodumene.....	14799
Spudding in wells for oil or gas field operations.....	13818
Staurolite, crude.....	14991
Staurolite, prepared.....	14992
Steam cleaning for oil or gas wells.....	13898
Steatite, crude.....	14961
Steatite, prepared.....	14962
Stone, crude, dimension other than limestone and granite.....	14191
Stone, crushed and broken, other than granite or limestone....	14292
Stones, abrasive.....	14970
Stoneware fire clay, crude.....	14531
Stoneware fire clay, prepared.....	14532
Stratigraphic drilling, oil or gas field exploration.....	13828
Strip mining services for anthracite.....	11128
Strip mining services for bituminous coal.....	12138
Strip mining services for lignite.....	12138
Strip mining services for metal mining.....	10818
Strip mining services for nonmetallic minerals (except fuels)....	14818
Stripping overburden services for anthracite mining.....	11128
Stripping overburden services for bituminous coal mining.....	12138
Stripping overburden services for lignite mining.....	12138
Stripping overburden services for metal mining.....	10818
Stripping overburden services for nonmetallic minerals (except fuels) mining.....	14818
Strontianite.....	14799
Strontium minerals.....	14799
Subbituminous coal, prepared.....	12112
Subbituminous coal, raw.....	12111
Subsurface remedial work for oil or gas field operations.....	13818
Sulfate, sodium.....	14743
Sulfur, native.....	14770
Surveying wells for oil or gas field operations.....	13898
Swabbing wells for oil or gas field operations.....	13898
Syenite (except nepheline), crude, dimension stone.....	14131
Syenite (except nepheline), crushed and broken.....	14232
Syenite (nepheline), crude.....	14591
Syenite (nepheline), prepared.....	14592
Sylvanite, crude.....	10421
Sylvanite, prepared.....	10422

T

Taconite concentrates or agglomerates.....	10112
Taconite, crude.....	10111
Tailing in wells, oil or gas field.....	13818
Talc, crude.....	14961
Talc, crushed, ground or sawed.....	14962
Talc, flotation concentrates.....	14962
Talc, prepared.....	14962
Tantalite, crude.....	10691
Tantalite, prepared.....	10692
Tantalum ores, crude.....	10691
Tantalum, prepared.....	10692
Telluride (gold) mining, crude.....	10421
Testing, drill-stem, for oil or gas field operations.....	13898
Testing, pipe, for oil or gas field operations.....	13898
Thorite, crude.....	10991
Thorite, prepared.....	10992
Thorium ores, crude.....	10991
Thorium, prepared.....	10992
Tin concentrates.....	10992
Tin metal ores, crude.....	10991
Titanium concentrates.....	10932
Titanium ore, crude.....	10931
Topaz (non-gem), crude.....	14591
Topaz (non-gem), prepared.....	14592
Trap rock, crude, dimension stone.....	14191
Trap rock, crushed and broken.....	14292
Travertine, crude, dimension stone.....	14121
Travertine, crushed and broken.....	14222
Tripoli.....	14970

Trona.....	14743
Tube-mill liners.....	14970
Tufa, calcareous, crude, dimension.....	14121
Tufa, calcareous, crushed and broken.....	14222
Tungsten concentrates.....	10642
Tungsten ores, crude.....	10641
Turquoise, crude.....	14991
Turquoise, prepared.....	14992

U

Ulexite.....	14744
Umber.....	14799
Uraninite, crude.....	10941
Uraninite, prepared.....	10942
Uranium-vanadium concentrates.....	10942
Uranium-vanadium ore, crude.....	10941

V

Vacuum truck service for oil or gas field operations.....	13898
Vanadium concentrates.....	10942
Vanadium ores, crude.....	10941
Verde antique, crude, dimension stone.....	14191
Verde antique, crushed and broken stone.....	14292
Vermiculite, crude.....	14991
Vermiculite, prepared.....	14992
Volcanic ash.....	14950
Volcanic rock, light colored, crude, dimension.....	14191
Volcanic rock, light colored, crushed and broken.....	14292

W

Washeries, anthracite.....	11112
Washeries, bituminous coal.....	12112
Water injection or flooding for oil or gas field operations...	13898

Water intake well drilling for oil and gas field operations...	13818
Well casing running, cutting and pulling for oil or gas field operations.....	13898
Well logging, oil or gas field.....	13898
Well plugging, for oil or gas field operations.....	13898
Well servicing, for oil or gas field operations.....	13898
Well surveying, for oil or gas field operations.....	13898
Wellhead fittings installed for oil or gas field operations...	13898

Wells, oil, gas, dry, or service: reworking.....	13818
Wells, oil, gas, or service: drilling in, spudding in, tailing in.....	13818
Whetstones.....	14970
Whiting, crushed and broken.....	14222
Willemite, crude.....	10331
Willemite, prepared.....	10332
Wireline services for oil or gas field operations.....	13898

Wolframite, crude.....	10641
Wolframite, prepared.....	10642
Wollastonite, crude.....	14991
Wollastonite, prepared.....	14992
Workover of wells for oil or gas field operations.....	13818
Wulfenite, crude.....	10691
Wulfenite, prepared.....	10692
Wurtzilite.....	14940

Z

Zinc concentrates.....	10332
Zinc ore, crude.....	10331
Zinc ore, crude, and old tailings shipped to mills for treatment.....	10331
Zinc ore, crude, and old tailings shipped to smelters.....	10331
Zirconium concentrates.....	10992
Zirconium ores, crude.....	10991

Appendix E

CENSUS REPORT FORMS

This appendix contains reproductions of a representative selection of the reporting forms used in the 1967 economic censuses, with emphasis on the Census of Mineral Industries. The use of each of them is described in the Introduction, Section 7, "Reporting Forms." Following is a list of the forms included in this appendix:

Number	Title
NC-X1A	1967 Report of Company Organization (a prec canvass report form mailed to all multiunits known from previous census records)
NC-X1B	1967 Report of Company Organization (a prec canvass report form mailed to firms regarded as possible multiunits, including mining companies with 250 employees or more who were not on the NC-X1A list)
NC-X3	General Schedule
NC-X6	Central Administrative Office or Auxiliary Establishment report
NC-K1	Company Summary Report
NC-K13	Company Exploration Expenditures and Assets for Oil and Gas Field Operations
--	General minerals report form (contains general statistics items for which data were collected from all mineral establishments)
MC-13A	Oil and Gas Field Operations report form (an example of the special inquiries items mailed to each oil and gas establishment. The inquiries on this report form were tailored to reflect the uniqueness of each industry)
--	Instruction Manual for Oil and Gas Field Operations, Form MC-13A (an example of the instruction manual mailed to mineral establishments)

FORM NC-X1A
(6-2-66)U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1967 REPORT OF COMPANY ORGANIZATION

NOTICE - Response to this inquiry is required by law (Title 13 U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining
to this report please refer to →

CENSUS FILE NO.

Complete this report within 20 days of receipt

and

RETURN TO

Bureau of the Census
Jeffersonville, Indiana 47130

Please Read Instructions Before Completing Report

Item 2A - COMPANY OWNERSHIP AND CONTROL

Is the firm named in Item 1 owned or controlled by another domestic company?

☐ YES☐ NO

If "YES," give name and address of owning or controlling company:

Item 1 - Name and address (Please correct any errors)

PLEASE RETURN THIS COPY

Item 2B - Does the firm named in Item 1 own or control any subsidiaries?

☐ YES - If "YES," be sure to include the required information
in this report for ALL subsidiaries.☐ NO - If "NO," report only for firm named in Item 1.

Item 3A - COMPANY ORGANIZATION - Listed in column (a) are the Employer Identification Numbers assigned to the firm named in Item 1 and to the subsidiaries it owns or controls, based on our records. Please BRING THIS LIST UP TO DATE by additions, corrections, and deletions. In column (b), enter name and address of main office or principal place of business for each Employer Identification Number. Be sure to include ALL E.I. numbers assigned, both active and inactive. IF MORE SPACE IS NEEDED FOR ADDITIONAL E.I. NUMBERS, USE ITEM 3B ON REVERSE SIDE.

Employer Identification Number
(a)Name and address of main office or principal place of business
(For E.I. numbers you DELETE, please explain)
(b)

Item 4A - LISTING OF YOUR DOMESTIC ESTABLISHMENTS (based on our records) - Please bring this list up to date by deleting establishments not operated by this firm or its subsidiaries in 1967; correcting establishment names, addresses (should be PHYSICAL LOCATIONS), and E.I. numbers, as necessary; and listing in Item 4B on the REVERSE SIDE all additional establishments now in operation or expected to be in operation at any time during 1967.

Line No.	Establishment NAME, ADDRESS of physical location, and Employer Identification Number (E.I.) (a)	CORRECTIONS AND REMARKS (Enter ZIP code of physical location, if known) (b)	Census establishment file number and codes (c)
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		
	Employer Identification No. →		

PLEASE COMPLETE REVERSE SIDE OF THIS REPORT, INCLUDING "CERTIFICATION"

Item 3B - COMPANY ORGANIZATION - Your listing of ALL additional Employer Identification Numbers not listed in Item 3A and currently assigned to your firm and its subsidiaries (both active and inactive). If additional spaces are needed, please use a sheet of paper labeled "Item 3, Continuation Sheet," identify with your name, address, and Census File Number, and attach to this report.

Employer Identification Number (a)	Name and address of main office or principal place of business (b)

ITEM 4B - YOUR LISTING OF ADDITIONAL DOMESTIC ESTABLISHMENTS - List below ALL domestic establishments of your firm and its subsidiaries not listed in Item 4A. Include those acquired by you through purchase, lease, construction, or other methods of acquisition; include those now in operation or expected to be in operation at any time during 1967. (For manufacturing and minerals additions, report former owner or operator, if any.) Each additional establishment should be listed on a SEPARATE LINE. (For exceptions, PLEASE READ INSTRUCTIONS.)

Establishment NAME, (your store or plant number, if any) ADDRESS of physical location, and Employer Identification Number (E.I.) (Enter ZIP code of physical location, if known) (a)	Kind of business activity		Approximate number of employees Mark (X) one (d)	FOR CENSUS USE (e)
	Major activity of establishment Mark (X) one (b)	List in order of importance the principal products made, lines of merchandise sold, types of services rendered, or construction activity performed. (c)		
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	

Item 5 - CERTIFICATION	Name of person to contact regarding this report		Address (Number, street, city, State, ZIP code)		Telephone		Number of continuation sheets returned with this report	
					Area code	Number		
					Ext.			
Please COMPLETE form before signing.	This report (including attached continuation pages) is substantially accurate and has been prepared in accordance with instructions.						Item 3	Item 4
	Signature of authorized person			Title		Date		

FORM **NC-X1B**
(7-13-66)U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS**1967 REPORT OF COMPANY
ORGANIZATION**Complete this report within 20 days of
receipt and return to:Bureau of the Census
Jeffersonville, Indiana 47130Item 1 - Is this name and address of
your firm CORRECT? →☐ Yes ☐ No

If "No," please correct any errors.

NOTICE - Response to this inquiry is required by law (Title 13 U.S. Code). By the same law your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.**EMPLOYER IDENTIFICATION NUMBER** →**PLEASE RETURN THIS COPY**Item 2 - Is the Employer Identification Number printed above the SAME as that
appearing on your latest Quarterly Federal Tax Return, Form 941?☐ Yes ☐ No - If "No," please enter the currently assigned
Employer Identification Number here. →**E. I. Number**Item 3 - Does this firm (designated by the currently
assigned E.I. Number shown above) operate
at MORE THAN ONE business location?☐ Yes - If "Yes," complete Items 4A and 4B
☐ No - If "No," skip to Item 5Item 4A - How many establishments
are operated by this firm?

Number

Item 4B - Please LIST each of these establishments on
the REVERSE SIDE of this report in Item 4B.

Item 5 - Does this firm own or control any companies using any OTHER Employer Identification Numbers?

☐ Yes - If "Yes," please list below ☐ No

Employer Identification Number

Name and address of main office or principal place of business

Item 6 - Is this firm owned or controlled by ANOTHER company?

☐ Yes - If "Yes," please identify below ☐ No

Employer Identification No. (if known)

Name and address of controlling company

Item 7 - **CERTIFICATION** - Please COMPLETE the report, including REVERSE SIDE (if applicable), before signing.

Name of person to contact regarding this report

Address (Number, street, city, State, ZIP code)

Telephone

Area code

Number

Ext.

This report is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person

Title

Date

If Item 3 is "Yes," be sure to complete REVERSE SIDE of this report →

Item 4B - Please list below ALL domestic establishments operated under your firm's currently assigned Employer Identification Number. Include each establishment now in operation or expected to be in operation at any time during 1967. (If additional space is needed to list all your establishments, please use blank continuation sheets and follow the format on this page. Be sure to enter the Employer Identification Number in the upper right-hand corner of each additional sheet.)

Establishment NAME, ADDRESS of physical location, and Employer Identification Number (E.I.) (Enter ZIP code of physical location, if known) (a)	Kind of business activity		Approximate number of employees Mark (X) one (d)	FOR CENSUS USE
	Major activity of establishment Mark (X) one (b)	List in order of importance the principal products made, lines of merchandise sold, types of services rendered, or construction activity performed (c)		
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	
Enter Employer Identification Number (9 digits) → - - - - -	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Construction <input type="checkbox"/> Minerals extraction <input type="checkbox"/> Retail trade <input type="checkbox"/> Wholesale trade <input type="checkbox"/> Manufacturers sales branch or office <input type="checkbox"/> Administrative office <input type="checkbox"/> Other - Specify →		2 <input type="checkbox"/> Under 10 3 <input type="checkbox"/> 10-19 4 <input type="checkbox"/> 20-49 5 <input type="checkbox"/> 50-99 6 <input type="checkbox"/> 100 or more	

Item 4C - Do the establishments listed above (and on continuation sheets, if any) EQUAL the number of establishments indicated in Item 4A?
☐ YES ☐ NO - If "NO," please explain →

PENALTY FOR FAILURE TO REPORT		DATE DUE: APRIL 30, 1968	Form Approved: Budget Bureau No. 41-567110				
FORM NC-X3 <small>(0300)</small>	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS						
1967 CENSUSES OF BUSINESS, MANUFACTURES, AND MINERAL INDUSTRIES GENERAL SCHEDULE							
<div style="display: flex; justify-content: space-between;"> Return to Jeffersonville Census Operations Office Jeffersonville, Indiana 47130 </div>							
<p style="text-align: center;">INTRODUCTORY NOTE</p> <p>The Bureau of the Census is now conducting a census of establishments primarily engaged in the types of activities described in item 9 (on the reverse side). However, our records do not contain sufficient information on the kind of business or activity carried on at your establishment. Please complete item 1, Parts A and B below, to provide this information. Then proceed according to the instructions given in Part C (i.e., if you are primarily engaged in one of the business activities described in Part B, boxes 1-29, you are required to complete only item 1, sign the certification in item 12, and return the form in the envelope provided; otherwise, you are required to complete the entire form).</p> <p style="text-align: center;">GENERAL INSTRUCTIONS</p> <p>If you operated more than one establishment (or location) under the same Employer Identification Number shown in the address box, this report should include consolidated figures for all locations; in item 11, however, please provide information separately for each location. If your Employer Identification Number was changed from that appearing in the address label, enter the currently assigned Employer Identification Number for this establishment in item 3.</p> <p>Information provided by you on this report should account for your business activities for the entire year 1967. If book figures are not available, enter your best estimates.</p>							
<p>1. KIND OF BUSINESS</p> <p>Part A - Describe your kind of business or activity during 1967.</p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>							
<p>Part B - Mark the box or boxes which best describe the kind of business or activity in which you were primarily engaged during 1967.</p> <p style="margin-left: 20px;">Agriculture, forestry, fishery</p> <p>1 <input type="checkbox"/> Farm or ranch</p> <p>2 <input type="checkbox"/> Agricultural, horticultural services (e.g., cotton ginning; corn shelling; contract grading fruits, vegetables)</p> <p>3 <input type="checkbox"/> Poultry hatchery</p> <p>4 <input type="checkbox"/> Veterinarian; animal hospital</p> <p>5 <input type="checkbox"/> Forestry (e.g., timber tracts, forest nursery)</p> <p>6 <input type="checkbox"/> Fishery</p> <p style="margin-left: 20px;">Transportation (Do not mark box if business is a travel agency, bus line, public warehouse, or trucking firm.)</p> <p>7 <input type="checkbox"/> Railroad</p> <p>8 <input type="checkbox"/> Taxicab</p> <p>9 <input type="checkbox"/> Water transportation</p> <p>10 <input type="checkbox"/> Air transportation</p> <p>11 <input type="checkbox"/> Pipeline</p> <p style="margin-left: 20px;">Communication</p> <p>12 <input type="checkbox"/> Telephone or telegraph service</p> <p>13 <input type="checkbox"/> Radio or television broadcasting</p> <p>14 <input type="checkbox"/> Electric, gas, sanitary services</p> <p style="margin-left: 20px;">Finance, insurance, real estate</p> <p>15 <input type="checkbox"/> Finance (bank; credit agency; security dealer, exchange)</p> <p>16 <input type="checkbox"/> Insurance</p> <p>17 <input type="checkbox"/> Real estate (except hotel operation, land subdividers and developers, and operative builders)</p> <p>18 <input type="checkbox"/> Medical and other health service - doctor, dentist hospital, etc. (except dental laboratory)</p> <p>19 <input type="checkbox"/> Educational service (except barber, beauty, dancing school)</p> <p style="margin-left: 20px;">Nonprofit membership organization</p> <p>20 <input type="checkbox"/> Trade association, board of trade, chamber of commerce</p> <p>21 <input type="checkbox"/> Professional membership organization</p> <p>22 <input type="checkbox"/> Labor union</p> <p>23 <input type="checkbox"/> Civic, social, fraternal association</p> <p>24 <input type="checkbox"/> Political organization</p> <p>25 <input type="checkbox"/> Religious organization</p> <p>26 <input type="checkbox"/> Charitable organization</p> <p style="margin-left: 20px;">Miscellaneous services</p> <p>27 <input type="checkbox"/> Accounting, auditing, bookkeeping</p> <p>28 <input type="checkbox"/> Artist, writer, lecturer</p> <p>29 <input type="checkbox"/> Government organization</p> <p>30 <input type="checkbox"/> Other kind of business or activity</p>							
<p>Part C - Is the kind of business or activity in which this establishment was PRIMARILY ENGAGED in 1967 described in boxes 1-29 above?</p> <p>(1) <input type="checkbox"/> Yes (2) <input type="checkbox"/> No</p> <p>If "No," answer all remaining questions on this form. If "Yes," you need not answer the remaining questions, but complete the certification (item 12 on reverse side) and return this form in the envelope provided.</p>							
<p>NOTICE - Response to this inquiry is required by law (Title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.</p> <p>In correspondence pertaining to this report, please refer to this Census File Number Employer Identification No.</p> <p style="text-align: center;">NC-X3 (0300)</p> <p style="text-align: center;"><small>(Please correct if name or address has changed)</small></p>							
<p>2. NAME AND PHYSICAL LOCATION</p> <p>a. Is the name shown in the label the name by which this establishment is known to the public?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (If "No," enter trade name above the label.)</p> <p>b. Is the address in the label -</p> <p>(1) <input type="checkbox"/> The mail address of your establishment but not the actual physical location.</p> <p>(2) <input type="checkbox"/> The mail address of your establishment (including number and street) which also is its actual physical location.</p> <p>(3) <input type="checkbox"/> Neither of the above (e.g., accountant's office).</p> <p>(NOTE: If you marked box 1 or 3, or number and street are not shown in the label, complete c, d, and e below. If you marked box 2, complete d and e below.)</p> <p>c. Enter following physical location information</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Number and street</td> <td style="width: 50%;">City, village, or other place</td> </tr> <tr> <td>State</td> <td>ZIP code</td> </tr> </table> <p>(NOTE: If location cannot be described by number and street, give name or number of highway and approximate distance from nearest town.)</p> <p>d. Enter name of county in which your establishment is located</p> <p>e. Is your establishment physically located within the boundaries of the city, village, or other place specified in the label or in "c"?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>				Number and street	City, village, or other place	State	ZIP code
Number and street	City, village, or other place						
State	ZIP code						
<p>3. EMPLOYER IDENTIFICATION NUMBER</p> <p>Is the Employer Identification (EI) Number printed in the address label the SAME as that used for this establishment on your latest 1967 Employer's Quarterly Tax Return, Treasury Form 941?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (If "No," enter the currently assigned EI number here (9 digits).)</p>							
<p>4. LEGAL FORM OF ORGANIZATION OF COMPANY X-1</p> <p>OPERATING THIS ESTABLISHMENT (Mark ONE box only)</p> <p>1 <input type="checkbox"/> Individual proprietor</p> <p>2 <input type="checkbox"/> Partnership</p> <p>3 <input type="checkbox"/> Corporation (Do NOT mark if any form of cooperative association)</p> <p>4 <input type="checkbox"/> Co-op (cooperative association), corporate or noncorporate</p> <p>5 <input type="checkbox"/> Other - Specify _____</p>							
<p>5. PERIOD OPERATED IN 1967 X-2</p> <p>a. Was this establishment in business at the end of 1967?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>(NOTE: For establishments which were inactive during December 1967 due to seasonal or part-time operations answer "Yes," unless the establishment was not owned by you at the end of the year.)</p> <p>b. How many months during 1967 did you own this establishment? Months X-3</p>							
<p>6. CLASS OF CUSTOMER X-4</p> <p>Mark the box which indicates the class of customer accounting for more than half of your entry in item 8a. If no one class accounts for more than half, indicate the approximate percentage next to each box.</p> <p>1 <input type="checkbox"/> _____ % General public (household consumers, farmers, individuals)</p> <p>2 <input type="checkbox"/> _____ % Construction and building trade contractors</p> <p>3 <input type="checkbox"/> _____ % Other business firms, government, institutions</p> <p>4 <input type="checkbox"/> _____ % Other - Specify _____</p>							
<p>7. METHOD OF SELLING X-5</p> <p>Mark only the ONE box which describes your principal method of selling</p> <p>1 <input type="checkbox"/> Selling at this establishment</p> <p>2 <input type="checkbox"/> Mail order (catalog selling)</p> <p>3 <input type="checkbox"/> House-to-house (direct selling)</p> <p>4 <input type="checkbox"/> Operating merchandise vending machines</p>							

FORM NC-X6 (0600)	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS	NOTICE - Response to this inquiry is required by law (Title 13 U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process. In correspondence pertaining to this report please refer to this Census File Number NC-X6 (0600)																								
1967 CENSUSES OF BUSINESS, MANUFACTURES, AND MINERAL INDUSTRIES CENTRAL ADMINISTRATIVE OFFICE OR AUXILIARY ESTABLISHMENT		Employer Identification Number																								
RETURN TO JEFFERSONVILLE CENSUS OPERATIONS OFFICE Jeffersonville, Indiana 47130																										
PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT If calendar year records are not available, fiscal year reports for the periods ending between October 31, 1967 and February 29, 1968 are acceptable. If book records are not available, enter your best estimate. This report should cover ONLY the establishment identified in the address label.																										
(PLEASE RETURN THIS COPY)																										
ITEM 1. NAME AND PHYSICAL LOCATION a. Name of this establishment, if different from that appearing in the address box _____ b. Is the address originally printed in the address box the ACTUAL PHYSICAL LOCATION OF THIS ESTABLISHMENT? <input type="checkbox"/> Yes - Complete lines (3) and (4) <input type="checkbox"/> No - Complete lines (1) through (4) <table style="width: 100%; border: none;"><tr><td style="border: 1px solid black; width: 40%; padding: 2px;">(1) Number and street</td><td style="border: 1px solid black; width: 60%; padding: 2px;">City, village, or other place</td></tr><tr><td style="border: 1px solid black; padding: 2px;">(2) State</td><td style="border: 1px solid black; padding: 2px;">ZIP code</td></tr></table> <small>NOTE - If location cannot be described by number and street, give name or number of highway and approximate distance from nearest town.</small> (3) County in which your establishment is physically located? _____ (4) Is the establishment physically located within the boundaries of the city or village? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No		(1) Number and street	City, village, or other place	(2) State	ZIP code	ITEM 2. EMPLOYER IDENTIFICATION NUMBER Is the Employer Identification (EI) Number printed in the address label the SAME as that used for this establishment on your latest 1967 Employer's Quarterly Federal Tax Return, Treasury Form 941? <input type="checkbox"/> Yes <input type="checkbox"/> No - (If "No," please enter the currently assigned EI Number here (9 digits)) _____																				
(1) Number and street	City, village, or other place																									
(2) State	ZIP code																									
ITEM 4. PRINCIPAL ACTIVITY OF THIS ESTABLISHMENT IN 1967 Mark the ONE item that best describes the principal activity of this establishment. If none applies, mark item (i) and enter a description of your principal activity. Mark one item only. <table style="width: 100%; border: none;"><tr><td style="width: 33%; vertical-align: top;">a. <input type="checkbox"/> 1 Centralized administration (i.e., supervisory functions of a central, home, general, branch, divisional or district office)</td><td style="width: 33%; vertical-align: top;">c. <input type="checkbox"/> 3 Warehousing</td><td style="width: 33%; vertical-align: top;">f. <input type="checkbox"/> 4 Trading stamp redemption</td></tr><tr><td style="vertical-align: top;">b. <input type="checkbox"/> 1 Management and other supporting services (e.g., purchasing or buying office, accounting office, legal office, public relations office, etc.)</td><td style="vertical-align: top;">d. <input type="checkbox"/> 7 Chainstore warehousing (i.e., a combination of administrative and warehousing activities described in a, b, and c)</td><td style="vertical-align: top;">g. <input type="checkbox"/> 8 Selling</td></tr><tr><td></td><td style="vertical-align: top;">e. <input type="checkbox"/> 2 Research, development, and testing</td><td style="vertical-align: top;">h. <input type="checkbox"/> 9 Repair service</td></tr><tr><td></td><td></td><td style="vertical-align: top;">i. <input type="checkbox"/> 9 Other (Describe) _____</td></tr></table>		a. <input type="checkbox"/> 1 Centralized administration (i.e., supervisory functions of a central, home, general, branch, divisional or district office)	c. <input type="checkbox"/> 3 Warehousing	f. <input type="checkbox"/> 4 Trading stamp redemption	b. <input type="checkbox"/> 1 Management and other supporting services (e.g., purchasing or buying office, accounting office, legal office, public relations office, etc.)	d. <input type="checkbox"/> 7 Chainstore warehousing (i.e., a combination of administrative and warehousing activities described in a, b, and c)	g. <input type="checkbox"/> 8 Selling		e. <input type="checkbox"/> 2 Research, development, and testing	h. <input type="checkbox"/> 9 Repair service			i. <input type="checkbox"/> 9 Other (Describe) _____	ITEM 3. LEGAL FORM OF OWNERSHIP OF COMPANY OPERATING THIS ESTABLISHMENT X-1 1 <input type="checkbox"/> Individual proprietor 2 <input type="checkbox"/> Partnership 3 <input type="checkbox"/> Corporation (Do not mark if any form of cooperative association) 4 <input type="checkbox"/> Co-op (cooperative association), corporate or noncorporate 5 <input type="checkbox"/> Other (Specify) _____												
a. <input type="checkbox"/> 1 Centralized administration (i.e., supervisory functions of a central, home, general, branch, divisional or district office)	c. <input type="checkbox"/> 3 Warehousing	f. <input type="checkbox"/> 4 Trading stamp redemption																								
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	e. <input type="checkbox"/> 2 Research, development, and testing	h. <input type="checkbox"/> 9 Repair service																								
		i. <input type="checkbox"/> 9 Other (Describe) _____																								
ITEM 5. PRINCIPAL ACTIVITIES OF YOUR COMPANY SERVICED BY THIS ESTABLISHMENT IN 1967 a. Does this establishment perform the above described management, general administrative functions, or other supporting services primarily for establishments of your company (rather than for other business firms or for the general public)? 1 <input type="checkbox"/> Yes - Complete items 5b, c, and d 2 <input type="checkbox"/> No - Skip to item 6		ITEM 6. PAYROLL AND EMPLOYMENT AT THIS ESTABLISHMENT DURING 1967 Report the payroll and number of persons employed at this establishment, including its traveling personnel. Do not include employees working in or from other establishments of your company, however, even though paid from this location. (The number and payroll of such employees should be included in the 1967 Census reports for the establishments at which they were actually employed.) <table style="width: 100%; border: none;"><tr><td style="width: 70%; border: none;"></td><td style="width: 10%; border: none; text-align: center;">THOUSANDS of dollars (\$000)</td><td style="width: 20%; border: none; text-align: center;">Key</td></tr><tr><td style="border: 1px solid black; padding: 2px;">a. Payroll during 1967. (Enter the total wages, salaries, bonuses, commissions, and other remuneration paid to employees of this establishment during 1967, before payroll deductions)</td><td style="border: 1px solid black; text-align: center;">\$</td><td style="border: 1px solid black; text-align: center;">X-6</td></tr><tr><td style="border: 1px solid black; padding: 2px;">b. Number of employees at this establishment during the pay period including March 12, 1967</td><td style="border: 1px solid black; text-align: center;">Number</td><td style="border: 1px solid black; text-align: center;">X-7</td></tr></table>		THOUSANDS of dollars (\$000)	Key	a. Payroll during 1967. (Enter the total wages, salaries, bonuses, commissions, and other remuneration paid to employees of this establishment during 1967, before payroll deductions)	\$	X-6	b. Number of employees at this establishment during the pay period including March 12, 1967	Number	X-7															
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b. Number of employees at this establishment during the pay period including March 12, 1967	Number	X-7																								
ITEM 7. EMPLOYMENT BY FUNCTION DURING THE PAY PERIOD INCLUDING MARCH 12, 1967 Distribute the number of employees reported in item 6b according to their principal functions at this establishment during the pay period including March 12, 1967. Where establishment records do not provide actual employee counts in terms of the functions listed, estimates of the approximate number in each are acceptable. Those persons performing a variety of functions should be reported in their primary activity during that pay period, or allocated on some other reasonable and consistent basis (e.g., by converting the total number of man-hours or man-days expended during the pay period into the average number of employees in each activity).		ITEM 8. WERE THE EMPLOYEES AND PAYROLL REPORTED IN ITEMS 6a AND 6b ABOVE ALSO REPORTED IN ANY OTHER 1967 CENSUS ESTABLISHMENT REPORT FORM OF YOUR COMPANY (i.e., in the Census Forms MA-, MC-, CB-, or CC-series)? 1 <input type="checkbox"/> Yes - If "Yes," please give the 11-digit CENSUS FILE NUMBER of that report _____ 2 <input type="checkbox"/> No																								
<table style="width: 100%; border: none;"><tr><td style="width: 60%; border: none;"></td><td style="width: 20%; border: none; text-align: center;">Approximate number of employees</td><td style="width: 20%; border: none; text-align: center;">Key</td></tr><tr><td style="border: 1px solid black; padding: 2px;">a. Centralized administration (e.g., various management functions of a general, home, or district office)</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-1</td></tr><tr><td style="border: 1px solid black; padding: 2px;">b. Research, development, and testing</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-2</td></tr><tr><td style="border: 1px solid black; padding: 2px;">c. Warehousing</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-3</td></tr><tr><td style="border: 1px solid black; padding: 2px;">d. Sales to customers directly from this location</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-4</td></tr><tr><td style="border: 1px solid black; padding: 2px;">e. Trading stamp redemption</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-5</td></tr><tr><td style="border: 1px solid black; padding: 2px;">f. Other (Describe)</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-6</td></tr><tr><td style="border: 1px solid black; padding: 2px;">g. TOTAL NUMBER OF EMPLOYEES (Sum of lines a through f; should equal item 6b)</td><td style="border: 1px solid black;"></td><td style="border: 1px solid black; text-align: center;">1-7*</td></tr></table>			Approximate number of employees	Key	a. Centralized administration (e.g., various management functions of a general, home, or district office)		1-1	b. Research, development, and testing		1-2	c. Warehousing		1-3	d. Sales to customers directly from this location		1-4	e. Trading stamp redemption		1-5	f. Other (Describe)		1-6	g. TOTAL NUMBER OF EMPLOYEES (Sum of lines a through f; should equal item 6b)		1-7*	
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f. Other (Describe)		1-6																								
g. TOTAL NUMBER OF EMPLOYEES (Sum of lines a through f; should equal item 6b)		1-7*																								

E-9

FORM NC-K1
(9991)U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NOTICE - Response to this inquiry is required by law (Title 13 U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

1967 CENSUSES OF
BUSINESS, MANUFACTURES,
AND MINERAL INDUSTRIES
COMPANY SUMMARY REPORT

In correspondence pertaining to this
report please refer to _____

CENSUS FILE NO.

Name and address (Please correct any errors)

RETURN TO

JEFFERSONVILLE CENSUS OPERATIONS OFFICE
Jeffersonville, Indiana 47130

Please read instructions before completing report

INSTRUCTIONS

This form will provide you and the Bureau of the Census with a systematic means for assuring that ALL DOMESTIC ACTIVITIES of your company and its subsidiaries have been accounted for in the 1967 Censuses of Business, Manufactures, and Mineral Industries. For the purposes of this report, "domestic" activities should include all 50 States and the District of Columbia. It should not include activities of your firm in foreign countries. (Note - Your Puerto Rico activities, if any, will be covered separately in the 1967 Census of Puerto Rico conducted jointly by the Commonwealth government and the U.S. Bureau of the Census.)

Please complete Form NC-K1, "Company Summary Report," after you have prepared all required 1967 Census establishment reports for your company and its subsidiaries, but before you return these completed reports to the Bureau of the Census. Preparing this Company Summary Report prior to returning the completed establishment reports may help you to discover more readily and to correct promptly any omission or duplication of reports for those establishments which should be covered in the 1967 Censuses of Business, Manufactures and Mineral Industries. In turn, this will speed up the Census Bureau's processing of your company report forms and will minimize any correspondence regarding coverage.

ITEM 1. GENERAL INFORMATION

A. NAME OF COMPANY

B. COMPANY ORGANIZATION

Is the above-named company owned or controlled by another company? Yes No
(If "Yes," please give name and address of owning or controlling company.)

C. LEGAL FORM OF OWNERSHIP OF COMPANY - Mark one

X-1

1 ☐ Individual proprietor8 ☐ Co-op (Cooperative association),
corporate or noncorporate2 ☐ Partnership9 ☐ Other (Specify) _____0 ☐ Corporation (Do not
mark if any form of
cooperative association.)

ITEM 2. EMPLOYMENT SUMMARY OF YOUR COMPANY AND ITS SUBSIDIARIES DURING 1967 - Column (a) lists the Employer Identification (E.I.) Numbers assigned to your company, based on information you reported on the 1967 Census Form NC-X1, "Report of Company Organization." If your company was assigned any other E.I. Numbers during any part of 1967, please add these numbers to the list. Then, complete ALL columns for EACH E.I. Number listed. (USE ITEM 2 Continuation Sheet if necessary.)

NOTE: All employment figures (Columns b through f) are for the pay period including MARCH 12, 1967

Line number	Employer Identification Numbers used by your company during 1967	Number of employees (as of March 12, 1967) reported on Treasury Payroll Tax Forms 941, 943, or CT-1	Employees in domestic establishments, as REPORTED on your 1967 Censuses of Business, Manufactures, and Mineral Industries forms:			Employees and payroll of domestic business activities, NOT REPORTED on your 1967 Censuses of Business, Manufactures, and Mineral Industries forms (i.e., agriculture; railroads; pipelines; radio and TV stations; insurance agencies; banks; etc.):		Total payroll for the year 1967 for these activities NOT REPORTED on your Census forms THOUSANDS of dollars (\$000)	For Census Use Only			
			Census Form MA- or MC- Series Production workers plus all others (Manufactures and Mineral Industries)	Census Form CB- or CC- Series (Wholesale, Retail, Service, and Construction)	Census Form NC-X6 (Central administrative offices and auxiliaries)	Employees in domestic activities NOT REPORTED on your Census forms	Description of these activities NOT REPORTED on your Census forms					
(a)	1-1	(b)	1-2	(c)	(d)	(e)	(f)	1-3	(g)	(h)	1-4	1-5*
1										\$		001
2										\$		002
3										\$		003
4										\$		004
5										\$		005
6										\$		006
7										\$		007
8										\$		008
9	Subtotal from Item 2 Continuation Sheet, if any											
10	TOTAL, All Employer Identification Numbers											

NUMBER OF ITEM 2 CONTINUATION SHEETS ATTACHED TO THIS FORM →

No. of sheets

ITEM 3. COVERAGE CHECK OF COMPANY EMPLOYMENT TOTALS

A. Comparison of COMPANY employment with ESTABLISHMENT employment for the pay period including March 12, 1967

Enter employment totals from Item 2, Line 10:

(1) From Column (c), total

(2) From Column (d), total

(3) From Column (e), total

(4) From Column (f), total

(5) Sum of figures above

(6) Sum of company employment reported on Treasury Payroll Tax Forms (From Column (b) in Line 10)

Number of employees reported in Item 2, line 10, above

Key

2-1

2-2

2-3

2-4

2-5

2-6

B. If the two figures in Lines (5) and (6) of Item 3A differ by more than 5 percent, please verify the reported figures in Item 2. (For each Employer Identification Number, compare the Column (b) figure with the sum of Columns (c), (d), (e), and (f). These totals should ordinarily be equal for each E.I. Number, if all employment has been accounted for.)

If, after such verification, a company-wide difference in excess of 5 percent still exists, please explain:

For Census Use Only

2-7

2-8

2-9*

Please continue on page 2

ITEMS 4-10. SELECTED COMPANY STATISTICS FOR 1967

Please report the following items on a consolidated basis for the DOMESTIC ACTIVITIES of your company and ALL its subsidiaries as defined in Item 2 of this report. Do not include foreign activities, if any, (except for reporting foreign assets in Item 10). Consolidate all domestic activities, whether or not covered in the 1967 Census by individual report forms. If calendar year records are not available, fiscal year reports for the periods ending between October 31, 1967 and February 29, 1968 are acceptable. If book records are not available, enter your best estimates. Before completing these items, please read the detailed instructions.

ITEM 4. COMPANY PAYROLL DURING 1967	Thousands of dollars (\$000)	Key
Report total wages, salaries, bonuses, commissions, and other remuneration paid by your company and its subsidiaries at domestic establishments and facilities during 1967, before payroll deductions.	Total company payroll during 1967	3-1
ITEM 5. COMPANY SALES AND RECEIPTS DURING 1967		
Report consolidated net sales and business receipts of your company and its subsidiaries during 1967.	a. Net company sales and business receipts during 1967	3-2
Exclude domestic intra-company transfers; exclude sales BY foreign subsidiaries; exclude non-operating income. Include sales to customers OUTSIDE your company; include excise taxes and sales taxes paid by your company directly to Federal, State, or local taxing agencies; include export transfers TO your foreign subsidiaries.	b. Does the entry in 5a above INCLUDE excise and sales taxes paid directly to taxing agencies? <input type="checkbox"/> Yes <input type="checkbox"/> No	3-3
	c. If "No," report here the amount of such taxes paid by your company and its subsidiaries during 1967	3-4
ITEM 6. CAPITAL EXPENDITURES DURING 1967 (EXCLUDE LAND AND MINERAL RIGHTS)		
Report all capital expenditures actually made during 1967 by your company and its subsidiaries for all domestic establishments and facilities. "Capital expenditures" refer to all costs that are chargeable to fixed assets accounts of your company for which depreciation or amortization accounts are ordinarily maintained; include major alterations, capitalized repairs and improvements; include expenditures made in 1967 for establishments under construction but not yet in operation.	Type of capital expenditures:	
Exclude capital expenditures made by owners of property rented or leased by your firm and its subsidiaries; but include expenditures made by your firm and its subsidiaries for structures which, on completion, were or are to be sold and leased back by your firm. Exclude cost of land, mineral rights, and cost of maintenance and repair charged as current and operating expenses; exclude capital expenditures by subsidiaries in foreign countries.	a. New structure and additions to plant	3-5
	b. New machinery and new equipment	3-6
	c. Used plant, machinery, and equipment acquired from others	3-7
	d. Capitalized development and exploration of mineral properties	3-8
	e. TOTAL CAPITAL EXPENDITURES DURING 1967 (Sum of Lines a, b, c, and d)	3-9*
ITEM 7. CHANGES IN FIXED ASSETS DURING 1967		
Report the value of fixed assets of your company and its subsidiaries for which depreciation and amortization accounts are ordinarily maintained. "Gross (book) value" represents the acquisition cost (original cost or other basis) to your company of such fixed assets. "Net value" represents the gross value of such fixed assets, less their accumulated depreciation and amortization.	a. Gross (book) value of fixed assets owned by your company, as of BEGINNING of 1967	4-1
Include fixed assets for all domestic establishments and facilities. Exclude fixed assets of your company and its subsidiaries in foreign countries. These assets should be reported in Item 10c below.	b. Net value of fixed assets, as of BEGINNING of 1967 (i.e., gross value, less accumulated depreciation and amortization)	4-2
Include all depreciable assets (buildings, structures, equipment, etc.) and amortizable fixed assets.	c. Total capital expenditures DURING 1967 (copy figure from Item 6e)	4-3
Exclude depletable assets (land, timber, and mineral rights) and non-fixed assets (inventories, cash, accounts receivable, etc.). These assets should be reported in Item 10b below.	d. Other acquisitions by your company (by merger, exchange of stock, etc.) of fixed assets DURING 1967 (if not included in Line c above)	4-4
Include in the value of assets all improvements and new construction that were "in-progress" but not yet completed at the end of 1967. Also include the value of fixed assets (machinery, equipment, buildings, structures, etc.) owned by your company and its subsidiaries but leased or rented to other companies.	e. Depreciation and amortization charges against fixed assets DURING 1967 (including charges against those acquired or completed during the year)	4-5
	f. Other deductions from fixed assets DURING 1967 (i.e., net value of assets sold, retired, scrapped, or destroyed; and other adjustments)	4-6
	g. Net value of fixed assets, as of END of 1967. (Should equal Lines b + c + d - e - f. If not, please comment in "Remarks.")	4-7*
ITEM 8. RENTAL PAYMENTS MADE DURING 1967 (EXCLUDE LAND)		
Report all rental payments made or accrued during 1967 to other firms which own the plant and equipment rented or leased by your company and its subsidiaries. In reporting rents paid (or equivalent charges) for use of "Buildings and structures," exclude separately identified fees for leasing of land (such as ground rents). Under "Machinery and equipment," be sure to include rental payments (or equivalent charges) for use of production machinery, office equipment, computer systems, passenger cars, trucks, materials handling equipment, and all other types of machinery or equipment.	Rental payments made by your company:	
	a. For use of BUILDING AND STRUCTURES (excluding land)	5-1
	b. For use of MACHINERY AND EQUIPMENT	5-2
	c. TOTAL RENTAL PAYMENTS DURING 1967 (Sum of Lines a and b)	5-3
ITEM 9. INVENTORIES, AS OF BEGINNING AND END OF 1967		
Report all inventories of your company and its subsidiaries at the beginning and end of 1967 on a comparable basis. Inventories should include: finished products; work-in-process; and materials, supplies, fuels, etc. Exclude inventories of subsidiaries in foreign countries. In aggregating the inventories of your company and its subsidiaries, report value on a current cost basis, if feasible, otherwise at book value.	Value of inventories:	
	a. All inventories, as of BEGINNING of 1967	5-4
	b. All inventories, as of END of 1967	5-5
ITEM 10. TOTAL COMPANY ASSETS, AS OF END OF 1967		
Report the balance sheet assets of your company and its subsidiaries on a consolidated basis. Lines a and b should include only domestic assets of your company and its subsidiaries. Line c should include all assets of your company and its subsidiaries in foreign countries, regardless of type.	Type of company assets:	
	a. Net value of fixed assets (From Item 7, line g)	5-6
	b. All other domestic assets (i.e., inventories, cash, accounts receivable, land, etc.)	5-7
	c. All foreign assets (i.e., assets located in foreign countries)	5-8
	d. TOTAL COMPANY ASSETS, AS OF END OF 1967 (Sum of Lines a, b, and c)	5-9*

REMARKS

ITEM 11.	Name of person to contact regarding this report	Address (Number and street, city, State)	ZIP code	Telephone	
				Area code	Number Ext.
CERTIFICATION	This report is substantially accurate and covers the period from _____ to _____				
	Signature of authorized person	Title	Date		

FORM NC-K13
(9913)U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NOTICE - Response to this inquiry is required by law (Title 13 U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

1967 CENSUS OF MINERAL INDUSTRIES

In correspondence pertaining to this report
refer to this Census File Number

NC-K13 (9913)

COMPANY EXPLORATION EXPENDITURES AND ASSETS FOR
OIL AND GAS FIELD OPERATIONS

RETURN TO

JEFFERSONVILLE CENSUS OPERATIONS OFFICE
Jeffersonville, Indiana 47130

KEEP THIS COPY FOR YOUR FILES

PLEASE COMPLETE AND RETURN THE FORM WHICH
SHOWS YOUR NAME AND ADDRESS

(Please correct if mailing address has changed)

CENSUS USE ONLY

1-1

1-2

GENERAL INSTRUCTIONS

As part of the 1967 Census of Mineral Industries, the Bureau of the Census is conducting this survey of domestic oil and gas field exploration expenditures and company assets on a **net working interest basis**. This form is designed to summarize company figures for items which are inappropriate for respondents to report on an **operator basis**.

All figures reported on this form should be on a **net working interest basis**. By contrast, figures reported on form MC-13A for oil and gas field operations represent a **company operated** basis and include data for properties operated both for own account and for others but **exclude** data for properties owned by your company but operated by others.

Include on a consolidated basis in this report data for domestic oil and gas field properties owned by all subsidiaries and divisions of your company.

If you have also received form NC-K1, "Company Summary Report," figures on that form should represent your **entire company** activities, whereas figures on this form (NC-K13) should represent **only** your oil and gas field activities. In addition, since the NC-K1 form was designed to apply to all large manufacturing, minerals, and business companies there are some differences in the definitions included on that form as compared to this one. Your report on NC-K13, of course, should exclude all data for natural gas liquids plants, pipelines, natural gas distribution systems, petroleum refineries, bulk tank stations, filling stations, or other activities of your company which should, however, be included on your form NC-K1 report.

ESTIMATES ARE ACCEPTABLE - We recognize that there is no uniform system of accounting for all companies and that reporting on this form may require that some companies use estimates. If you do not have records showing the items requested, approximate figures will be acceptable.

Section I - EXPLORATION EXPENDITURES DURING 1967 - Report charges to both the **current expense and capital accounts for 1967**.

Column (B) - Report expenditures for acquiring nonproducing acreage, including lease bonuses and any other outlays necessary to acquire leases, mineral rights, and fee lands incident to oil and gas exploration except land department, leasing, and scouting expenditures.

Column (C) - Report expenditures for lease rents and other expenditures for carrying leases, such as shut-in royalties and annual payments.

Column (D) - Report all land department, scouting, and lease acquisition expenditures except the actual outlays for purchase or land leasing reported under columns (B) and (C).

Column (E) - Report all geological and geophysical expenditures, including core drilling and other drilling where the intention is not to complete the well as a producing well.

Columns (G), (H), and (I) - Report all expenditures for 1967 (reduced by amount of outside contributions) for drilling exploratory wells including wells still drilling at the end of the year. Report payments to contractors and direct expenditures for labor, supplies, water, fuel, and power used. Include expenditures for casing, tubing, and wellhead fittings associated with exploratory wells; expenditures for roads, grading, etc.; and all other expenditures incident to exploratory drilling. Exclude material salvaged after use, but include the cost of salvaging. Exclude all expenditures for equipment beyond the Christmas tree and expenditures for all down-hole pumping and artificial lift equipment.

Column (J) - Report all contributions paid toward test wells.

Column (K) - Report all other expenditures which relate to exploration for oil and gas, including direct overhead.

Section II - GROSS BOOK VALUE OF OIL AND GAS FIELD ASSETS AT THE END OF 1967 - Report your own net working interest value before depreciation and amortization of all oil and gas assets owned, as per your books, whether operated or nonoperated, excluding the value of any assets belonging to others on property which you report. Enter the original or acquisition cost of the fixed assets on the books of this company such as mineral properties, buildings, structures, machinery, and equipment; capitalized drilling and completion costs; and other fixed assets for which depreciation, depletion, or amortization reserves are ordinarily maintained.

Under mineral properties (leasehold investment) report acquisition and capitalized development costs.

Column (3) - Report data for properties being held for later exploration and properties shut-in at the end of 1967.

Column (C) - Report data for properties which are producing at the end of 1967.

Column (D) - Report data for properties on which work is being done at the end of 1967 and which has been capitalized, but for which it is not yet possible to determine whether the properties will be productive.

Column (E) - Under buildings, other structures, and machinery, include lease tanks, lines up to delivery end of lease tanks and delivery gas meter, oil and gas field rail and other roads, and power plants. Include drilling rigs, lease equipment, motors, as well as furniture and fixtures for offices, cafeterias, change rooms, and transportation equipment. Report value of assets for all types of equipment for which capital expenditures are reported on form MC-13A under items 7b, 7c, and 7d.

Please complete page 2 before signing here	Name of person to contact regarding this report		Address (Number and street, city, State)		ZIP code	Telephone		
						Area code	Number	Extension
CERTIFICATION - This report is substantially accurate and covers the period from _____ to _____								
Name of company			Address (Number and street, city, State)			ZIP code		
Signature of authorized person			Title			Date		

Please continue on reverse side

COMPANY EXPLORATION EXPENDITURES AND ASSETS - OIL AND GAS FIELD OPERATIONS

Report net working interest in thousands of dollars

Section I - EXPLORATION EXPENDITURES DURING 1967

Geographic area	2	2-1	2-2	2-3	2-4	2-5	2-6*	2	2-1	2-2	2-3	2-4	2-5	2-6
	Key	Total (Sum of columns (B)-(E) and (G)-(K)) (A)	Lease and land acquisitions of nonproducing acreage (B)	Lease rents (C)	Land department, leasing, and scouting (D)	Geological and geophysical (E)	Key (F)	Drilling and equipping wells			Contributions paid (J)	Other (K)		
								Dry (G)	Successful (H)	In progress (I)				
Northeast ¹	1000	\$	\$	\$	\$	\$	1001	\$	\$	\$	\$	\$	\$	\$
East North Central ²	2300						2301							
West North Central ³	2400						2401							
South Atlantic ⁴	3500						3501							
East South Central ⁵	3600						3601							
West South Central Arkansas	3710						3711							
Louisiana	3720						3721							
Oklahoma	3730						3731							
Texas	3740						3741							
Mountain New Mexico	4850						4851							
Other ⁶	4890						4891							
Pacific California	4930						4931							
Other ⁷	4990						4991							
United States, total	5550						5551							

Section II - GROSS BOOK VALUE OF OIL AND GAS FIELD ASSETS AT END OF 1967

Geographic area	2	2-1	2-2	2-3	2-4	2-5	2-6
	Key	Total (Sum of columns (B)-(E)) (A)	Mineral properties (leasehold investment)			Buildings, other structures, and machinery (exclude land) (E)	
			Nonproducing properties (B)	Producing properties (C)	Work in progress (D)		
Northeast ¹	1002	\$	\$	\$	\$	\$	
East North Central ²	2302						
West North Central ³	2402						
South Atlantic ⁴	3502						
East South Central ⁵	3602						
West South Central Arkansas	3712						
Louisiana	3722						
Oklahoma	3732						
Texas	3742						
Mountain New Mexico	4852						
Other ⁶	4892						
Pacific California	4932						
Other ⁷	4992						
United States, total	5552						

¹Northeast - Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.²East North Central - Ohio, Indiana, Illinois, Michigan, and Wisconsin.³West North Central - Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.⁴South Atlantic - Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.⁵East South Central - Kentucky, Tennessee, Alabama, and Mississippi.⁶Mountain, Other - Montana, Idaho, Wyoming, Colorado, Arizona, Utah, and Nevada.⁷Pacific, Other - Washington, Oregon, Alaska, and Hawaii.

Remarks

ITEM 12	Legal form of organization of the company which operates this establishment - (X) appropriate box.			X-1
Legal form of organization at end of 1967	1 <input type="checkbox"/> Individual proprietor	0 <input type="checkbox"/> Corporation - (Do not mark if any form of cooperative association)		
	2 <input type="checkbox"/> Partnership	8 <input type="checkbox"/> Co-op (Cooperative association), corporate and noncorporate		
		9 <input type="checkbox"/> Other - (Specify) _____		
ITEM 13	a. Changes in operator or operations of this establishment since 1963			X-2
Changes in operator, operations, or company affiliation	(1) <input type="checkbox"/> No change in operator or operations	Discontinued operations - Date _____		
	(2) <input type="checkbox"/> Reorganized, (Describe in "Remarks," e.g., partnership change, or change in corporate status)	(4) <input type="checkbox"/> Leases abandoned, and plant dismantled or destroyed		
	(3) <input type="checkbox"/> Started exploration, development, or production operations - Date _____	(5) <input type="checkbox"/> No exploration, development or maintenance, but still owned		
	(6) <input type="checkbox"/> Establishment purchased or leased from another company (Enter below: Name, address, and Employer Identification Number (if known) of former owner or operator and date of purchase or lease.)	(7) <input type="checkbox"/> Establishment sold or leased to another company (Enter below: Name, address, and Employer Identification Number (if known) of new owner or operator and date of sale or lease.)		
	Name of company _____		Address (Number, street, city, State, ZIP code) _____	E.I. Number (9 digits) _____ Date _____
	(8) If establishment was purchased or leased, indicate whether the records of the predecessor company were also acquired 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No		(9) If establishment was sold or leased indicate whether successor also acquired records 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	
	b. Company affiliation - Complete only if the first digit of your Census File Number (imprinted in the address box) is a zero "0." Census records indicate these companies operate only one establishment.			X-3 V-12
	(1) Is this company owned or controlled by any other company?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	(2) Does this company own or control any other companies?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	(3) Does this company operate more than one establishment?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	(4) Did this company have any exploration or development operations not included in this report in the year?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
ITEM 14	a. Other companies owned or establishments operated			
Complete if item 13b (2), (3), or (4) is marked "Yes."	Name and address and Employer Identification Number		Activity (Describe, e.g., mining, manufacturing, retail, wholesale, etc., and chief products, or if nonproducing chief products expected)	Payroll and value of shipments and receipts (\$000)
	1 _____			Payroll _____ Shipments and receipts _____
	1 _____			Payroll _____ Shipments and receipts _____
	1 _____			Payroll _____ Shipments and receipts _____
Employer Identification Number _____				Are payrolls, & shipments or receipts incl. in this report? Yes <input type="checkbox"/> No <input type="checkbox"/>
Employer Identification Number _____				Yes <input type="checkbox"/> No <input type="checkbox"/>
Employer Identification Number _____				Yes <input type="checkbox"/> No <input type="checkbox"/>
Employer Identification Number _____				Yes <input type="checkbox"/> No <input type="checkbox"/>
b. Parent company	2 _____			
Complete if item 13b (1) is marked "Yes."	Employer Identification Number _____			
ITEM 15 - Not applicable to this form.				
Checks to assure a complete and accurate report	The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report: (1) Review the report carefully to see that no items are omitted for the year being covered; (2) Calculate and enter figures for the four "reasonableness" checks below, and review the results; (3) Correct your report for any errors you find; explain unusual figures in "Remarks."			
	"Reasonableness" checks	Calculation required for each check		Figures for 1967
a. Average hourly wages per production worker	Item 3Aa (Production workers' wages) ÷ item 4e (Total man-hours)		\$ _____	
b. Hours worked per year per production worker	Item 4e (Total man-hours) × 1000 ÷ item 2f (Average number of production workers)		Hrs. _____	
c. Salaries and wages per dollar of shipments and receipts	Item 3Ac (Total payroll) ÷ item 9 (Total value of shipments and receipts)		c _____	
d. Cost of supplies per dollar of shipments and receipts	Item 5f (Total supplies etc. cost) ÷ item 9 (Total value of shipments and receipts)		c _____	
e. Is the total of Value of Shipments (item 9) plus total of Capital Expenditures (item 7e) greater than the sum of Payroll (item 3Ac) plus total Cost of Supplies, etc. (item 5f) <input type="checkbox"/> Yes <input type="checkbox"/> No - Explain in "Remarks."				
f. Does the figure in item 9 agree with that reported in item 18 for Total Value of Shipments and Receipts? <input type="checkbox"/> Yes <input type="checkbox"/> No - Explain in "Remarks."				
Remarks _____				

Please continue on page 3

FORM MC-13A (1301)	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS	FILE NO.	Page 3		
1967 CENSUS OF MINERAL INDUSTRIES		Name of establishment (Same as address box)			
OIL AND GAS FIELD OPERATIONS - Continued					
Item 16 - WATER INTAKE DURING 1967			4-8		
The total quantity of water intake (fresh and brackish, including water for flooding and water that was produced with oil) in this establishment during the entire year 1967 - (Mark one box only)					
<div style="display: flex; justify-content: space-between;"> <div> 1 <input type="checkbox"/> Under 1 million gallons 2 <input type="checkbox"/> 1 to 9 million gallons </div> <div> 3 <input type="checkbox"/> 10 to 19 million gallons 4 <input type="checkbox"/> 20 to 99 million gallons </div> <div> 5 <input type="checkbox"/> 100 million gallons or over </div> </div>					
Item 17A - GAS PURCHASED FOR GAS LIFT AND REPRESSURING, PURCHASED MACHINERY INSTALLED, AND SUPPLIES USED DURING 1967					
INSTRUCTIONS					
Report delivered cost of the individual items below which were used during 1967. (For valuation, see instructions for item 5 in attached Instruction Manual.)		Report quantities in the unit of measure specified in column (B-2). Include the cost of items marked in column (E) in "All other supplies," line 4.			
Line number	7	7-1	7-2	7-3	7-4
		Census material code	Unit of measure for quantities	Received from other establishments of this company or purchased from others	
				If \$5,000 or more of the listed item was used	
			Quantity	Cost, including delivery cost (freight-in) (D)	
				Millions	Thousands
				Dollars	If you used some but less than \$5,000 worth of the listed item, enter an - (X)
		(A)	(B-1)	(B-2)	(C)
		000	000	000	(E)
1		GAS PURCHASED FOR GAS LIFT AND REPRESSURING (Exclude gas reported in item 18C, lines 2 and 3.)		131305	5
2		PURCHASED MACHINERY INSTALLED		353011	0
3		SUPPLIES USED Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)		331201	4
4		All other supplies (such as drill bits and reamers, drilling fluid materials, cement, lumber, lubricants, and water purchased) (List the three principal types of supplies included here.)		970099	8
5		TOTAL (Sum of lines 1-4 should be same as item 5a.)			
Item 17B - FUELS USED DURING 1967					
Line number	7	7-1	7-2	7-3	7-4
		Census code	Unit of measure for quantities	If \$2,000 or more of the listed item was used	
				Cost, including delivery cost (freight-in) (D)	
			Quantity	Millions	Thousands
				Dollars	If you used some but less than \$2,000 worth of the listed item, enter an - (X)
		(A)	(B-1)	(B-2)	(C)
		000	000	000	(E)
1		FUELS PURCHASED OR RECEIVED Fuel oil Distillate (light) grade numbers 1, 2, 4, and light diesel fuel		291141	0
2		Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel		291151	9
3		Gas - natural, manufactured, and mixed		131311	3
4		Gasoline		291111	3
5		Other fuels - liquefied petroleum gas, coal, coke, wood, and other		960019	8
6		TOTAL (Sum of lines 1-5 should be same as item 5c.)			
7		FUELS PRODUCED AND USED AT THIS ESTABLISHMENT FOR POWER OR HEAT Crude petroleum, including lease condensate		131206	5
8		Natural gas		131308	9

Please continue on page 4

Item 18B - PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1967

INSTRUCTIONS

DO NOT COMBINE LINES - Report separately and include all products of the establishment which were produced or physically shipped from the establishment during 1967. Report the entire output of wells operated by you and reported in item 20A, including royalty interests and subsidy payments. Include products shipped on consignment, whether or not sold at the end of 1967. Include as shipments material produced at this establishment and transferred for processing or use by your company at other establishments such as your natural gas liquids plants, pipelines, petroleum refineries, other manufacturing establishments, or separate sales branches. See Instruction Manual, section D, for method of determining transfer values.

Report total amounts received or due for oil and gas field contract work done during 1967, including receipts for supplies and equipment furnished by you incidental to this work. Do not include amounts received for work done prior to 1967.

Report quantities in the unit of measure specified in column (B-2). All crude petroleum figures are to be reported in THOUSANDS of barrels. For example, if the complete figure to be reported is 210,697 barrels, enter 211. All natural gas figures are to be reported in MILLIONS of cubic feet. For example, if the complete figure is 310,293,000 cubic feet, enter 310.

Report total values f.o.b. wells. Include in the selling value, royalty, if any, but exclude transportation charges to the purchaser or user.

Line number	Products and services (A)	8 (B-1) Census product code	8-1X (B-2) Unit of measure for quantities	8-3		8-4			
				Products at wells and services performed					
				Quantity (D)	Value, f.o.b. well (E)			Dollars	
					Millions	Thousands			
					000	000	000		
1	PRODUCTS Crude petroleum, including lease condensate (Report volumes corrected to 60° F.) Shipped	13120 03	5 Thousand barrels		\$				
2	Used in lease operations for power, heat, or other purposes, including losses (Also report oil used for power or heat in item 17B, line 7.)	13120 06	8 Thousand barrels						
3	Lease condensate produced (Report volumes corrected to 60° F.)	13130 41	4 Thousand barrels						
4	Natural gas (Adjust all volumes to a pressure base of 14.73 pounds absolute at 60° F.) Shipped To distributors and transmission companies and net to natural gas liquids plants (In value include the producer's realization from all products in the gas delivered to natural gas liquids plants.)	13130 12	5 Million cu. ft.						
5	To consumers (domestic, commercial, and industrial, including own refineries)	13130 22	4 Million cu. ft.						
6	Other products shipped (Specify kind and unit of measure)								
7	SERVICES PERFORMED FOR OTHER ESTABLISHMENTS Geophysical exploration	13828 01	7						
8	Other exploration	13828 03	3						
9	Well surveying and well logging	13898 04	4						
10	Drilling oil, gas, dry, or service wells	13818 01	8 Thousand feet						
11	Drilling in, spudding in, and tailing in	13818 02	6 Thousand feet						
12	Reworking wells	13818 04	2 Thousand feet						
13	Building (erecting), repairing, or dismantling rigs and derricks	13898 09	3						
14	Excavating slush pits or cellars	13898 18	4						
15	Running, cutting, and pulling casing, tubes, or rods	13898 14	3						
16	Cementing wells	13898 01	0						
17	Perforating well casing	13898 03	6						
18	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing	13898 02	8 Number of wells						
19	Hydraulic fracturing	13898 11	9 Number of wells						
20	Cleaning out, bailing out, or swabbing wells	13898 25	9 Number of wells						
21	Installing production equipment, such as wellhead fittings, pumps, and engines	13898 15	0						
22	Erecting, cleaning, repairing, or dismantling lease tanks	13898 27	5						
23	Oil and gas field machine shop work	35993 00	5						

Please continue on page 5

FORM MC-13A (1310)		U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS		FILE NO.		Page 5		
1967 CENSUS OF MINERAL INDUSTRIES OIL AND GAS FIELD OPERATIONS - Continued				Name of establishment (Same as address box)				
Item 18B - PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1967 - Continued								
Line number		8	8-1XX	8-4				
		Census product code (B-1)	Products at wells and services performed					
			Value, f.o.b. well (E)					
			Millions	Thousands	Dollars			
		000	000	000				
(A)								
24	SERVICES PERFORMED FOR OTHER ESTABLISHMENTS - Continued Hauling oil and gas field supplies and equipment	95120 03	8	\$				
25	Pumping wells but not operating leases Other oil and gas field services (Specify kind)	13898 35	6					
26		13898 36	6					
27	Other services (Specify kind)							
REALES Sales of products purchased and resold without further processing (Exclude oil and gas purchased for resale.)								
28	The cost of such products should be reported in item 5b.	99989 00	6					
29	TOTAL (Sum of lines 1-28)	77000 00	8	\$				
Item 18C - NATURAL GAS PRODUCTION AND DISPOSITION For definitions of "Oil wells" and "Gas and gas condensate wells," see instructions for item 20A.								
Line No.		9	9-1	9-2	9-3	9-4		
		Census code (B)	Total (C)	Gas production (Million cubic feet)		Oil wells (casinghead) (D)	Gas and gas condensate wells (E)	
(A)								
1	Shipped (Should be the same as column (D), lines 4 and 5, item 18B.)	3301	9					
2	Used in lease operations for power, heat, or gas lift (net) (Also report gas used for power or heat in item 17B, line 8.)	3311	8					
3	Returned to underground formations for repressuring, pressure maintenance, and cycling (Exclude gas reported in item 17A, line 1.)	3313	4					
4	Increase in underground storage	3315	9					
5	Decrease in underground storage	3317	5					
6	Vented to air, burned in flares, and other losses	3318	3					
7	TOTAL DISPOSITION (Sum of lines 1-6)	3319	2					
Item 18D - QUANTITY OF SHIPMENTS DURING 1967, BY OWNERSHIP								
Line number		9	9-1	9-2	9-3	9-4	9-5	9-6
		Code	Unit of measure	Total (Sum of columns (E) - (H))	Operator account			Account of others
(A)								
1	Crude petroleum, including lease condensate (Column (D) should equal item 18B, column (D), line 1.)	8912	Thousand barrels					
2	Natural gas (Column (D) should equal item 18B, column (D), sum of lines 4 and 5.)	8938	Million cubic feet					
Item 19 - MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS, BY DEPARTMENT, DURING 1967								
Line number		9	9-1	8326				
		Key (B)	Man-hours (C)					
			Millions	Thousands	Hours			
			000	000	000			
(A)								
1	Operating and maintaining wells		9-2					
2	Drilling wells and rig building		9-3					
3	Exploration work (except drilling wells) Other work (Specify kind)		9-4					
4			9-5					
5	TOTAL MAN-HOURS (Sum of lines 1-4)		9-6					

Please continue on page 6

INSTRUCTIONS

Report below the number of "oil" and "gas and gas condensate" wells operated by you in the State, district, or offshore territories designated in items 1 and 21A. Exclude all service wells and dry holes. Use the following definitions.

Oil well - Represents a well that can produce hydrocarbons existing in the reservoir in liquid form.

Gas or gas condensate well - Represents a well that can produce hydrocarbons existing initially in the gaseous phase in the reservoir.

The State regulatory classification should be used, if available; if unavailable, use a classification by company engineers.

Count multiple completions as one well. Report a multiple completion as an "oil well" if oil can be produced from at least one of its zones, even though gas or gas condensate may be produced from other zones. Report a multiple completion as a "gas or gas condensate well" if oil cannot be produced from any of its zones.

Line number	Item	9	9-1	9-2	9-3	9-4*	Line number	Item	9	9-1	9-2	9-3	9-4*
		Code	Number of wells			Code			Number of wells			Gas and gas condensate	
			Total	Oil	Gas and gas condensate				Total	Oil	Gas and gas condensate		
(A)	(B)	(C)	(D)	(E)	(A)	(B)	(C)	(D)	(E)				
1	Producing during December 1966	9217				6	Producing during December 1967	9316					
2	Shut-in or idle during all of December 1966	9225				7	Shut-in or idle during all of December 1967	9324					
						8	Converted to service wells during 1967	9332					
3	Successful wells completed during 1967	9233				9	Abandoned during 1967 (exclude dry holes)	9340					
4	Purchased or leased during 1967	9282				10	Sold or leased during 1967	9357					
5	TOTAL → (Sum of lines 1-4)	9209				11	TOTAL → (Sum of lines 6-10 same as line 5)	9365					

Item 20B - WELLS DRILLED AND COMPLETED DURING 1967

INSTRUCTIONS

Report the designated costs of drilling and equipping all wells completed during 1967, including the cost of dry holes and service wells drilled. Report only the costs specified. Do not include other costs such as taxes, interest on investment, etc. Do not reduce costs by test well and dry hole contributions.

For definitions of "oil," "gas and gas condensate," and types of "multiple completion" wells, see instructions for item 20A.

Lines 1-7 - Report wells drilled which you operated, including wells drilled for own account, and dry holes drilled which you would have operated had they been producers. The number of successful wells should be the same as reported in item 20A, line 3.

Line 3 - Include wells drilled and abandoned without commercial production during 1967 even if they were converted to service wells.

Line 4 - Include gas-injection, water-injection, and brine-disposal wells. Exclude dry holes and all other wells drilled with intent of commercial production even if converted to service wells during 1967.

Line 8 - Report wells drilled for others on a contract, fee, or other basis. Do not include costs borne directly by oil or gas companies and not covered by amounts received by you for contract work such as reported in item 18B, line 18.

Column (C) - Count multiple completions as one well.

Columns (F)-(K) - Report cost of labor, supplies, water, fuel, and power used in operations such as erecting and dismantling drilling rig and derrick, drilling hole, running and cementing casing, and hauling materials. Include machinery and tool charges or rentals; deduct the value of material salvaged after use.

Column (H) - Include cost of delivering and installing equipment, except payments to contractors or subcontractors (columns (F) and (G)). Deduct value of your equipment that was salvaged and used again, but include cost of salvaging. Include tubing, wellhead fittings, gas traps, flow tanks, etc., and drilling derrick retained over well after completion, or special production derrick.

Column (J) - Report items such as artificial lift equipment, separators, heater-treaters, flow lines, and storage tanks. Include associated contract services.

Line number	Kind of wells drilled (A)	Code (B)	9-1		Code (E)	9-2		9-3		9-4		9-5		9-6		9-7*	
			Wells completed during 1967			Cost of drilling and equipping wells completed during 1967 (Thousands of dollars)										TOTAL COST (Sum of columns (F)-(J))	
			Number of wells (C)	Total footage drilled (Thousand feet) (D)		Cost, excluding lease equipment beyond the Christmas tree										Cost of lease equipment beyond the Christmas tree (J)	TOTAL COST (Sum of columns (F)-(J)) (K)
Payments to drilling contractors or subcontractors, including day work and turnkey (F)	Payments to other contractors or subcontractors (G)	Cost of casing, tubing, and well equipment (H)			All other costs of drilling and equipping (I)												
1	WELLS DRILLED WHICH YOU OPERATED, including wells drilled for own account Oil wells	9514			95117	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2	Gas and gas con- densate wells	9522			95216												
3	Dry holes	9530			95315												
4	Service wells	9548			95414												
5	TOTAL —————→ (Sum of lines 1-4)	9506			95018	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Please continue on page 7

FORM MC-13A (1301)		U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS					FILE NO.		Page 7		
1967 CENSUS OF MINERAL INDUSTRIES											
OIL AND GAS FIELD OPERATIONS - Continued											
Item 20B - WELLS DRILLED AND COMPLETED DURING 1967 - Continued											
Line number	Kind of wells drilled (A)	Code (B)	Wells completed during 1967		Code (E)	Cost of drilling and equipping wells completed during 1967 (Thousands of dollars)					
			Number of wells (C)	Total footage drilled (Thousand feet) (D)		Cost, excluding lease equipment beyond the Christmas tree					TOTAL COST (Sum of columns (F)-(J)) (K)
						Payments to drilling contractors or subcontractors, including day work and turnkey (F)	Payments to other contractors or subcontractors (G)	Cost of casing, tubing, and well equipment (H)	All other costs of drilling and equipping (I)	Cost of lease equipment beyond the Christmas tree (J)	
6	WELLS DRILLED - Continued Multiple completions included in line 5 of preceding page Oil wells	9654			96511	\$	\$	\$	\$	\$	\$
7	Gas and gas condensate wells	9670			96719						
8	WELLS DRILLED FOR OTHERS on a contract, fee, or other basis	9704			97014						
Item 20C - WELLS DRILLED AND COMPLETED DURING 1967 WHICH YOU OPERATED, BY DEPTH RANGE											
INSTRUCTIONS											
Include wells drilled for own account.						Likewise, the sum of columns (D) and (G) should agree with the corresponding figures in item 20B, column (D). The sum of columns (E) and (H) should agree with item 20B, column (K) minus column (J).					
The sum of columns (C) and (F) for each type of well, by depth ranges, should agree with the total number of wells of the same type reported in item 20B, column (C).											
Line number	Kind of wells drilled by depth ranges in feet (A)	Code (B)	Exploration wells		Code (E)	Development wells		Code (H)			
			Number of wells (C)	Total footage drilled (Thousand feet) (D)		Cost of drilling and equipping, excluding costs beyond the Christmas tree (Thousands of dollars) (F)	Total footage drilled (Thousand feet) (G)				
1	OIL WELLS Less than 2,500	1011 6				\$		\$			
2	2,500 to 4,999	1013 2									
3	5,000 to 9,999	1015 7									
4	10,000 to 12,499	1017 3									
5	12,500 and over	1019 9									
6	GAS AND GAS CONDENSATE WELLS Less than 2,500	1021 5									
7	2,500 to 4,999	1023 1									
8	5,000 to 9,999	1025 6									
9	10,000 to 12,499	1027 2									
10	12,500 and over	1029 8									
11	DRY HOLES Less than 2,500	1031 4									
12	2,500 to 4,999	1033 0									
13	5,000 to 9,999	1035 5									
14	10,000 to 12,499	1037 1									
15	12,500 and over	1039 7									
Item 20D - COST OF DRILLING AND EQUIPPING WELLS COMPLETED DURING 1967 WHICH YOU OPERATED, BY SOURCE OF FUNDS											
Line number	Source of funds (A)	Key (B)	Total cost (C)								
			Millions (D)	Thousands (E)	Dollars (F)						
1	Operators	9-2	\$								
2	Other participating interests	9-3									
3	Contributors	9-4									
4	TOTAL (Should be same as item 20B, line 5, column (K).)	9-5	\$								

Please continue on page 8

INSTRUCTIONS

List below the counties in the State or district covered by this report in which you operated oil or gas field properties or performed oil and gas field services during 1967. If this is a report for the offshore operations for a State, report only on the lines for "Offshore locations" and "TOTAL." The total figure in column (C) should equal the sum of the figures in items 2a and 2g.

Total figure in column (D) should equal item 18B, column (D), line 1. Total figure in column (E) should equal sum of item 18B, column (D), lines 4 and 5. Total figure in column (F) should equal the sum of figures in item 18B, column (E), lines 7-27. Total figure in column (G) should be same as item 7e.

Line number	State, county (or parish), and offshore locations (A)	9-1			9-2	9-3	9-4	9-5			9-6		
		Code			Number of employees in pay period including March 12, 1967 (C)	Crude petroleum, including lease condensate, shipped during 1967 (Thousands of barrels) (D)	Natural gas shipped during 1967 (Million cubic feet) (E)	Amount received or due for services performed during 1967 (F)			Capital expenditures during 1967 (G)		
		Millions	Thousands	Dollars				Millions	Thousands	Dollars			
		000	000	000				000	000	000	000	000	000
1		8						\$			\$		
2		8											
3		8											
4		8											
5		8											
6		8											
7		8											
8		8											
9		8											
10		8											
11		8											
12		8											
13		8											
14		8											
15		8											
16		8											
17		8											
18		8											
19		8											
20		8											
21		8											
22		8											
23	Offshore locations	8	99	888									
24	TOTAL (Sum of lines 1-23)	9	00	00	000	1		\$			\$		

Item 21B - LEASE TANKS AND CRUDE STOCKS AT END OF 1967

Enter on lines 1 and 2 the number and total capacity of all tanks used for storing crude petroleum on the leases covered by this report. Enter on line 3 stocks of crude petroleum corrected to 60° F., in these tanks on December 31, 1967. Enter total stocks and not your own company's interest only. (Do not include in this item pipeline storage reported to the Bureau of Mines on Form 6-1311-M, Section B, "Pipeline and Tank Farm Stocks.")

Line No.	Item	9	9-1	13359
			Key	Quantity (December 31, 1967)
1	LEASE TANKS Number		9-2	
2	Capacity (Barrels)		9-3	
3	LEASE STOCKS (Barrels)		9-4*	

Item 22	Name of person to contact regarding this report		Address (Number and street, city, State)		ZIP code	Telephone		
						Area code	Number	Extension
	CERTIFICATION - This report is substantially accurate and covers the period from _____ to _____							
	Name of company		Address (Number and street, city, State)			ZIP code		
Signature of authorized person		Title		Date				

Use additional sheets of paper, if necessary, to complete any item or to submit any explanation. Identify each sheet with the 11-digit file number appearing over your name.

1967 CENSUS OF MINERAL INDUSTRIES

INSTRUCTION MANUAL FOR OIL AND GAS FIELD OPERATIONS FORM MC-13A

In all correspondence with the Census Bureau, please include the 11-digit file number which appears in the address box of the report form. High-speed electronic equipment will be used to identify both the correspondence and the reports in the 1967 Economic Censuses. If your correspondence does not include the Census file number, it will be returned for the addition of that number. Address all correspondence to:

JEFFERSONVILLE CENSUS OPERATIONS OFFICE
1201 East 10th Street
Jeffersonville, Indiana 47130

As you complete the report for each establishment, please enter the 11-digit file number at the top of the odd-numbered pages as requested.

This booklet is provided to assist you in filling out the enclosed Census of Mineral Industries Form MC-13A. Please read these instructions and those appearing on the individual report forms for each item before entering your figures.

A. WHO SHOULD REPORT?

The Census of Mineral Industries reports are required by law (Title 13 U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

Every concern which operated oil or gas wells, drilled such wells for its own account or for others, performed exploration work for oil or gas, or performed oil or gas field services for others during any part of calendar year 1967 is required to submit a separate report on form MC-13A for each State (excluding offshore operations) or, for Texas, Louisiana, New Mexico, and California, for each district within the State. Separate reports are also required for offshore operations adjacent to each State. Return reports to the Jeffersonville Census Operations Office as shown on the enclosed envelope.

For the operation of oil and gas field properties, the report should be prepared by the **operator** of the properties, whether or not he is the owner or is operating the properties under lease or contract. Each report should be made on a gross basis for all properties

operated in the State (or district for Texas, Louisiana, New Mexico, and California) and separately for offshore operations. The report should not include data for properties in which the company only owns an interest but which were operated by others.

Based on Census Bureau records, a report form is provided for each State, district, or offshore area in which your company had oil and gas field activities either as an operator or contractor in 1967. If you have not received sufficient forms to cover all the oil and gas field activities of your company, write for needed forms. Be sure to describe the type of activities carried on at the establishments for which you request additional forms.

1. What is a mineral establishment?

An oil or gas field mineral establishment is defined for Census purposes, as representing all oil and gas field activities in one State (or district in Texas, Louisiana, New Mexico, and California, see map on pages 6 and 7, operated by the reporting company. Such activities include the operation of oil and gas field properties by the reporting company and performance of oil and gas field services for others by that company. Offshore operations adjacent to each State represent a separate establishment. It does not include natural gas liquids plants, pipelines, natural gas distribution systems, petroleum refineries, bulk tank stations, or filling stations. In order to segregate such operations a limited amount of prorating or estimating is acceptable when book records are not readily available.

2. How to report for establishments with no production during 1967

If any of your company's oil and gas field properties has no production at all and you performed no services for others during 1967, you should nevertheless return the report for each such establishment with all other information completed and "O" entered in items 9 and 18B. If a mineral location was not in production, but had custodial employees, maintained inventories, made shipments during the year, drilled wells, or conducted exploration work, the information should be reported in the appropriate sections of the report form. The Census includes sites under exploration and oil and gas fields under development or maintenance only.

B. WHAT ACTIVITIES SHOULD BE REPORTED?

Each report on form MC-13A should cover the activities in one State, or one district in Texas, Louisiana, New Mexico, and California, of concerns which operated wells; performed oil or gas field work for their own account; or performed oil or gas field work for others on a contract, fee, or other basis. Include in the report exploration for oil and gas, drilling and operation of wells, repressuring oil fields, separating and emulsion breaking at field tanks, the operation of field dehydration and pressure maintenance plants, gathering lines, and field storage facilities. For reports on contract services, include such work as exploration for oil and gas; drilling oil, gas, dry, and service wells; drilling water wells for oil-field use; building derricks and lease tanks; running and pulling casing; cementing and shooting wells; and installing production equipment. Do not include the operation of natural gas liquids plants, which should be reported on form MC-13B, or the operation of petroleum refineries which should be reported on form MC-29A. If your concern is engaged in other mining activities, such as mining clay or uranium ores, appropriate report forms should be obtained.

Each report should also include activities such as generating energy for oil and gas field use; maintenance of equipment; and receiving, shipping, storage, research, record keeping, health, safety, food service, and other services, when carried on primarily for oil and gas field operations. The report should exclude the operation of company stores, boarding houses, bunk houses, and recreational facilities. The report should also exclude sales branches, research laboratories, and general administrative offices, if they were operated as separate establishments.

Offshore operations - A separate report should be made for offshore exploration, drilling, and production operations in territories contiguous to each State. Include areas under Federal jurisdiction as well as under State jurisdiction. For reporting purposes, an offshore well is one which is bottomed at, or producing from, a point which lies seaward from the coastline. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters. For Louisiana, the coastline is defined as the "Chapman

Line" as modified by subsequent adjudication. For Alaska, offshore is defined as including Cook Inlet. Note that wells drilled to, and producing from, points underlying inland waters (except Cook Inlet) are considered to be onshore.

C. WHAT PERIOD SHOULD EACH REPORT COVER?

Each report should cover the calendar year 1967. However, a report is required even if the establishment was operated only part of the year. If your book records are not on a calendar year basis, carefully prepared estimates will be acceptable. If reporting on a calendar year basis will involve considerable additional costs, and your fiscal year covers at least 10 months of calendar year 1967 (i.e., ends between October 31, 1967 and February 29, 1968), you may report on a fiscal basis. However, all employment, payroll, and man-hour figures should relate to the calendar year rather than the fiscal year. (These calendar year payroll records should be available from your tax records.)

In the certification, the dates should show the exact period which the report covers. Thus, if an establishment began to operate or ceased to operate within the year, the dates should span only that part of the year during which the oil or gas field properties were operated or services for others were performed. If the operator changed during the year, complete the report only for that part of 1967 in which your company operated the properties or performed such services. Report in item 13 the appropriate information on changes in ownership or operation.

On page 1 of the form a shaded column appears. If our records indicate that a comparable report was prepared by you for 1963, the form will have entries based on that report in the shaded column. It is **not** necessary for you to enter any figures in the shaded column. In some instances, the original reported figures have been changed as a result of correspondence or telephone conversations with representatives of your company, or as a result of comparing the 1963 report with your reports filed in earlier years. You should review the data shown for 1963 when entering 1967 figures, and may correct them if they seem inconsistent.

D. HOW SHOULD MULTIPLE ESTABLISHMENT COMPANIES DETERMINE TRANSFER VALUES OF PRODUCTS AND MATERIALS FROM ONE ESTABLISHMENT TO ANOTHER ("INTERPLANT TRANSFERS")?

One of the important statistical measures of mining activity is "value added by mining," which is derived by the Census Bureau from the figures reported for value of shipments; capital expenditures; and cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed during the year.

In order for statistics on value added and other subjects to be comparable from industry to industry or area to area, it is necessary that the operations of each establishment of a multiple establishment organization be reported as though the establishment were a separate "economic" unit. This means that the value of interplant transfers within a company should

include, in addition to direct costs of production, a reasonable proportion of "all other costs (company overhead) and profits." The establishments receiving such transfers should report them as purchased materials, minerals for treatment, supplies, fuels, or electric energy at the same value plus costs of freight and other direct handling charges. (See item 5.) Such transfer values should be reported, for example, for crude petroleum transferred to your company's refineries and for natural gas transferred to your company's natural gas liquids plants.

E. DIVISION REPORTS FOR TEXAS, LOUISIANA, NEW MEXICO, AND CALIFORNIA, OR OFFSHORE OPERATIONS

Companies operating in Texas, Louisiana, New Mexico, and California have been sent additional forms for making separate reports for each district (see map on pages 6 and 7) and for offshore operations in each State. In completing the additional forms, enter on each such form in the address box the 11-digit file number appearing in the box above your name on the addressed form, the name of your company, and the district being reported.

SPECIFIC ITEMS

Item 1. PHYSICAL LOCATION – Since reports for oil and gas field operations should represent an entire State (except offshore operations); an entire district for Texas, Louisiana, New Mexico, and California; or all offshore activities adjacent to a State, only line (2) State should be completed. Enter in line (2) the State covered by the report; for a district show the State and district; or for offshore operations show the State followed by the designation "offshore." In item 21A list all counties in which you had activities in the specified State or district.

Item 2. NUMBER OF EMPLOYEES

You may follow the definition of employees specified by your State Employment Security Agency. Report part-time and full-time employees at the establishment who worked or received pay for any part of the pay period (preferably one week) including the 12th of the specified months (i.e., March, May, August, and November of 1967 for "production, development, and exploration workers" and March only for "all other employees"). **Include** all persons on paid sick leave, paid holidays, and paid vacation during these pay periods, as well as those actually working; **exclude** members of armed forces and pensioners carried on your active rolls. **Include** officers at this establishment, if a corporation; if an unincorporated concern, **exclude** proprietor or partners. **Exclude** employees of contractors or subcontractors who performed work for you. **Include** persons at a general office serving oil and gas field operations; do not include any such employees included on form NC-X6, "Central Administrative Offices and Auxiliary Establishments."

If your company was also engaged in this State or district in natural gas liquids production, petroleum refining, other manufacturing, or wholesale or retail trade operations, for Census purposes, employees such as medical staff and yardmen, who work in units that serve these establishments and also oil and gas fields, should be distributed among the respective establishments. The earnings and man-hours of such employees should be likewise distributed.

Item 2a-f. Production, Development, and Exploration Workers – Workers (up through the working foreman level) engaged in manual work, using tools, operating machines, hauling materials, loading and hauling products; caring for mineral properties; exploration work, development, storage, shipping, maintenance, repair, watchman services, auxiliary production for own use (e.g., power plant), record keeping, and other services closely associated with these production and development operations. **Exclude** supervisory employees above working foreman level. For reports from operators, **exclude** employees of contractors.

Item 2f – Divide the total on line **e** by 4 and enter the result on line **f**; divide by 4 even if the establishment did not operate in all four periods.

Item 2g. All Other Employees – Nonproduction personnel at this establishment engaged in supervision above the working foreman level, sales, highway trucking, advertising, credit, collection, clerical and routine office functions, executive, purchasing, finance; and in legal, personnel (including cafeteria, medical, etc.), professional (engineers, geologists, etc.), and technical work. **Include** construction employees on your payroll engaged in construction of major additions or alterations to your facilities who are utilized as a separate work force (force-account employees). Workers engaged in regular maintenance and repair operations should be included with production, development, and exploration workers. **Include** officers at this establishment, if a corporation, but, if unincorporated, **exclude** proprietor or partners. For reports from operators **exclude** employees of contractors.

Item 3A. PAYROLLS – You should follow the definition of salaries and wages that is used for calculating the withholding tax. Report the gross earnings paid in calendar year 1967 to employees on the payroll at the establishment prior to such deductions as employee's Social Security contributions, withholding taxes, group insurance premiums, union dues, and savings bonds. **Include** in gross earnings commissions, dismissal pay, paid bonuses, vacation and sick-leave pay, and the cash equivalent of compensation paid in kind, such as board and housing. **Include** salaries of officers of this establishment, if a corporation; if an unincorporated concern, **exclude** payments to proprietor or partners. **Exclude** payments to contractors or subcontractors who performed work for you (such payment should be reported in item 5e). **Exclude** payments to members of armed forces and pensioners carried on your active payroll. **Exclude** royalty payments to unions.

Item 3B. SUPPLEMENTAL LABOR COSTS NOT INCLUDED IN PAYROLLS

Item 3Ba. Legally Required Expenditures, Including Social Security Contributions – Report employer contributions for all programs required under Federal and State legislation such as Federal Old Age and Survivors' Insurance, unemployment compensation, and workmen's compensation. Establishments located in Rhode Island, California, New York, and New Jersey should also include State temporary disability payments.

Item 3Bb. Payments for Voluntary Programs – Include union negotiated contracts. For programs supported by joint employer-employee contributions, **include** only the employer payments. **Include** employer payments of: (a) insurance premiums on hospital and medical plans, (b) life insurance premiums, and (c) premiums on supplementary accident and sickness insurance. In reporting payments for insurance report net payments, i.e., gross payments less any offsetting dividends, refunds, or other reductions in premiums.

Also **include** payments or allocations on: (a) all pension plans regardless of method of administration, (b) supplemental unemployment compensation plans, (c) welfare plans, (d) stock purchase plans in which the employer payment is not subject to withholding tax, and (e) deferred profit sharing plans.

The items listed in the paragraph above are generally considered as deferred rather than current income to employees and are not subject to withholding of income tax. If the payments or allocations by the company are made to a fund, payments to employees out of these funds should not be reported. However, payments made directly to retired employees or their survivors that do not pass through a fund should be included in item 3Bb.

Exclude expenditures not of the type listed above such as losses on company operated cafeterias and snack bars, cost of in-plant medical services, cost of free parking lots, discounts on employee purchases, cost of uniforms and other work clothing supplied to employees, and similar expenditures.

Exclude payments which should be reported as wages and salaries in item 3A, such as payments for holidays, vacations, sick pay, bonuses, unused vacation, jury pay, night shift bonus, suggestion awards, and the payments in the form of shared profits and special stock purchases which are subject to withholding tax.

If any of the items are maintained in your records only at the company level, allocate to the mining establishments. In such cases, you may distribute the total on the basis of the ratio of the payroll of each mining establishment to the total company payroll unless you have developed your own method of making such allocations. Specify in "Remarks" the method used and the approximate portion that has been allocated.

Item 4. MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS, BY QUARTER – The man-hour figures are designed to measure the over-all activity of the establishment during the year on **both active and inactive days**. For oil and gas field operations, only the total man-hours are required in item 4, no data need be reported by quarter. Report man-hours by department in item 19. The figures should represent all man-hours worked or paid for, except hours for paid vacations, holidays, or sick leave, when the employee was **not** at the establishment. If an employee elects to work during the vacation period, report only actual hours worked by such employee. Overtime hours should be reported as actual hours worked, not straight-time equivalent hours.

The figures should account for **all** man-hours worked at this establishment for the entire year by all full-time and part-time production, development, and exploration workers reported in item 2. **Exclude** hours worked by employees of contractors or subcontractors who performed work for you, or by proprietors or partners.

A man-hour is the work of one person for one hour. Report figures from actual records of man-hours whenever available. If no records of man-hours were kept, estimate man-hours from payroll or other records.

Item 5. COST OF SUPPLIES, ETC.

The entries in this item are used by the Census Bureau to calculate the 1967 value added by mining. The figures reported should represent the total purchase cost of supplies, gas purchased for gas lift and repressuring, purchased machinery installed, purchased fuels for power or heat, etc., actually used during 1967 whether purchased or withdrawn from inventories. Include items charged to **both the current and capital accounts**.

Include items consumed by the establishment during the year although purchased prior to 1967; gas purchased from others for gas lift (this should also be reported separately in item 17A), purchased supplies consumed for production, drilling, other development, exploration, maintenance, and repair of plant and equipment, and in plant construction; supplies which you furnished without charge to contractors or sold to employees for use on the oil and gas properties covered by this report; consumption of items received from other establishments of your company for which separate reports are being submitted.

Exclude items received during the year which were not consumed; services such as advertising, telephone, telegraph, cable, insurance, development, and research rendered by other establishments to this establishment, or services of engineering, management, marketing, legal, and other professional consultants, etc.; expenses such as depreciation and depletion charges against plant and equipment, rent and rental allowances, interest payments, royalties, and use of patent fees; supplies (such as timber or lumber), parts, or machinery **produced at this establishment**; extraordinary losses such as by fire and flood; and wages of your employees engaged in maintenance and repair work (report these wages in item 3A); and oil and gas produced on these properties.

If your records do not show the amounts actually consumed during 1967, the figures to report may be derived from purchase and other records. Cost of purchases may be used if these do not differ significantly from the amounts actually used. However, if consumption of any major item differs significantly from purchases, the amount used may be estimated by adding beginning-of-year inventories to the amounts purchased and subtracting from this total the cost of the item on hand at the end of the year.

Cost is delivered cost and should be the amount actually paid or payable after discounts and should include freight and other direct charges incurred by the establishment in acquiring supplies consumed. The cost figures for consumption should represent receipts from all sources, i.e., amounts purchased from other establishments, withdrawn from inventories, or obtained from other establishments of the same company.

For supplies, gas purchased for gas lift, machinery installed, purchased fuels, and electric energy received from other establishments of your company, cost should be checked against the values reported for the establishment producing and transferring the supply (see instruction D on page 2). Freight and other direct handling charges should be added.

Item 5a. Supplies Used, Minerals Received for Preparation, and Purchased Machinery – The following list of examples of supplies will indicate the types of items which should be included. The list is shown only as an example. It should not be considered a complete list of the items which should be included.

Bearings	Piling
Bolts, screws, and nuts	Pipe and fittings
Casing	Plates and sheets
Cement	Pumps
Clay	Rods and bars
Drill bits and reamers	Stationery, stamps, and
Drilling fluid materials	office supplies
First aid and safety	Sulfuric acid
supplies	Tools, dies, jigs, and
Gears and pinions	fixtures
Hand tools	Tubing
Hardware	Water purchased
Lubricating oils	Welding rods, electrodes,
Lumber	and acetylene
	Wire, cable, and chain

Include also gas purchased for gas lift or repressuring and all new and used machinery, equipment, and parts installed whether purchased or received from other establishments of your company.

Include only physical goods used or put into production. **Exclude services used or overhead charges.** The cost of services performed for you by others should be reported in item 5e.

Item 5b. Products Bought and Resold Without Further Processing – Report the cost of all products bought and resold in the same condition as when purchased. (Total sales value of such products resold is to be reported in item 18B, line 28.) **Exclude** oil or gas purchased for resale.

Item 5c. Purchased Fuels Consumed – Report the total cost of all purchased fuels consumed during 1967 for heat, power, or the generation of electricity. Include anthracite, bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, wood, and all other fuels, including purchased steam. **Exclude** gas purchased for gas lift. **Exclude** crude petroleum and natural gas produced at this establishment and used for power or heat (report this in item 17B lines 7 and 8. Fuels used at these operations, but produced in another establishment of your company, such as petroleum refinery or natural gas liquids plant products, should be reported as fuels in items 5c and 17B, lines 1–6, and commercial values assigned to them. (See instruction D on page 2.)

Item 5d. Purchased Electricity – Report the total cost of electric energy purchased during 1967 from other companies or received from other establishments of your company. **Exclude** the value of electricity generated and used at this establishment, but report its quantity in item 8b.

Item 5e. Contract Work Done for You by Others – Report the total payments made for contract or subcontract services performed during 1967, including payments for supplies and equipment furnished by the contractor incidental to this work.

If part of the payment to a contractor was in oil or gas produced, an estimate of the value of the service should be reported.

Item 6. MINERAL RIGHTS AND GEOLOGICAL EXPENDITURES – Oil and gas field operations need not report in this item. However, selected companies will be asked to report such information on a net working interest basis on form NC-K13.

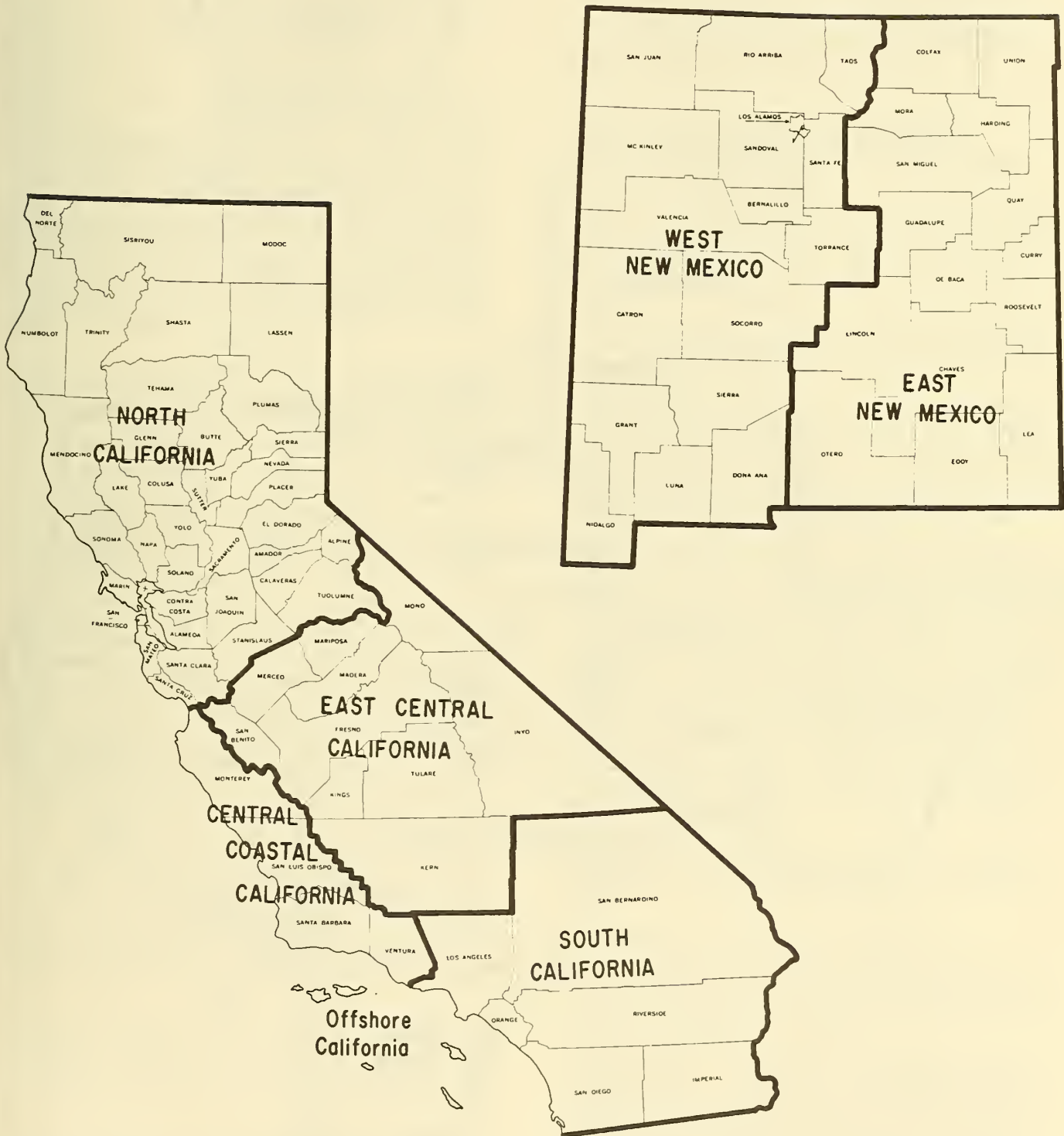
Item 7. CAPITAL EXPENDITURES DURING YEAR EXCEPT LAND AND MINERAL RIGHTS

Report the actual capital outlays during 1967, not the final value of development or buildings completed, or equipment put in place during the year. Capital expenditures during 1967 may be determined by the following computation: (a) the cost of exploration work, development work, and additions completed during the year, plus (b) work-in-progress at the end of the year, minus (c) work-in-progress at the beginning of the year. Labor and installation costs should be included whether on contract or by your own forces. These expenditures are of the type for which depreciation or depletion accounts are ordinarily maintained. Do not include the cost of maintenance and repairs charged as current operating expense. If no expenditures of the kind described were made, enter "0."

Item 7a. Mineral Development and Exploration – Report development and exploration outlays which were charged to a capital account. **Include** capitalized expenditures for oil and gas field exploration, and for drilling oil, gas, dry, and service wells.

DISTRICT MAP

CALIFORNIA AND NEW MEXICO



DISTRICT MAP

TEXAS AND LOUISIANA



Item 7b. New Structures and Additions – Include expenditures for new construction, major additions, and alterations (including improvements and capitalized repairs) for power plants, repair shops, offices, lease tanks, lines up to delivery end of lease tanks and delivery gas meter, and oil and gas field rail and other roads. Include, where capitalized, expenditures for construction by your own employees. **Exclude** construction of company houses, recreational facilities, and rail and other roads and pipe lines used only for transportation beyond the limits of properties covered by this report.

Item 7c. New Machinery and Equipment – Report total expenditures at this establishment for new machinery and new equipment capitalized during 1967. Include replacements as well as additions to capacity. Include the value of equipment produced and used at this establishment. Include new drilling rigs and lease equipment, new casing and wellhead fittings, and also new motors, as well as new office machines and fixtures, furniture, cafeteria and change-room furnishings, automobiles, trucks, and similar equipment. Include the value of improvements and capitalized repairs to equipment installed after completion of wells.

Item 7d. Used Plant and Equipment – Report total expenditures at this establishment for old or existing plants and for secondhand equipment acquired from others, including the U.S. Government. Include at approximate market value used machinery or equipment transferred from other establishments of your company.

Item 8. QUANTITY OF ELECTRICITY

Report all quantities of electricity in thousands of kilowatt hours.

Item 8a. Purchased Electricity – Report the quantity of electricity for which cost is reported in item 5d.

Item 8b. Generated Electricity – Enter the total quantity of electric energy generated at this establishment (gross less generating station use) during 1967. Include energy which was sold to other companies or transferred to other establishments of your company. Include energy generated at the drilling site which was used for lighting and other purposes. Estimate quantity if book records are not available.

When a figure is reported on this line, data relating to the activity of the power stations should also be included in other sections of this report. For example, the number of employees assigned to the power station, their wages and man-hours, should be included in the figures reported in items 2, 3, and 4 and the cost of fuels used to generate electricity, in items 5c and 17B.

Item 8c. Electricity Sold or Transferred – Enter the quantity of electric energy, which was also included in items 8a and 8b, but which was sold to other companies or transferred to other establishments of your company.

Item 9. QUANTITY AND VALUE OF PRODUCTS SHIPPED AND OTHER RECEIPTS – See instructions on form.

Item 10. GROSS BOOK VALUE FIXED ASSETS – Oil and gas field operations need not report in this item. However, selected companies will be asked to report such information on a net working interest basis on form NC-K13.

Item 16. WATER INTAKE DURING 1967 – If you do not have exact records of the total quantity of water intake at this establishment, estimate the amount on the basis of the approximate number of gallons for a typical working day and the number of days which your establishment was operated during 1967. Include only primary intake from natural sources; do not include recirculation.

Item 17A. GAS PURCHASED FOR GAS LIFT AND REPRESSURING, PURCHASED MACHINERY INSTALLED, AND SUPPLIES USED DURING 1967

This inquiry calls for a breakdown of the gas purchased for gas lift at these operations, purchased machinery installed, and supplies used during 1967 reported in item 5a of this form. Separate figures are required for each item listed. The total cost in item 17A, column (D), should agree with the total cost reported in item 5a.

Column (C). Quantity – Report the quantities actually used in terms of the unit of measure specified in column (B-2).

Column (D). Delivered Cost – Report amounts actually paid or payable after discounts, and include freight and direct charges incurred in acquiring the quantities of the listed items during 1967. For supply items transferred from other establishments of this company, report values as described in instruction D on page 2.

Line 2. Purchased Machinery Installed – Include all machinery, equipment, parts for renewals and repairs, and used plant which were purchased, or which were received from other establishments of your company, whether charged to the current or capital accounts. (Machinery charged to the capital account should also be reported in Item 7.) Include equipment which was installed at these operations as well as mobile equipment. Include such equipment as exploration and well survey machinery, drilling rigs, derricks, flow tanks, oil and gas separators, pumping equipment, Christmas trees, gauges, gas traps, control equipment, chokes, and trucks and cars for use on lease. Exclude such items as casing, tubing, and pipe which should be reported in item 17A, line 3.

Line 3. Steel Mill Shapes and Forms – If records for the tonnage of steel mill shapes and forms used are not available, an estimate is acceptable.

Item 17B. FUELS CONSUMED DURING 1967

Report only fuels used at this operation for power or heat or generation of electricity. Exclude gas purchased for gas lift which should be reported as a supply in items 5a and 17A, line 1.

Lines 1-6. Fuels Purchased and Received From Other Establishments – Report all fuels purchased from other companies or transferred from other establishments of your company. The total cost in item 17B should agree with item 5c. Report the quantities of purchased fuels in the unit of measure specified in column (B-2).

Line 4. Gasoline – Report gasoline used in automotive equipment as well as other equipment.

Lines 7 and 8. Fuels Produced and Used at This Establishment for Power and Heat – Report quantities of crude petroleum and natural gas which were produced and used at the operations covered by this report. Note that crude petroleum is to be reported in **thousands** of barrels and natural gas in **millions** of cubic feet at 14.73 pounds absolute at 60° F.

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1967

Line 26. Other Oil and Gas Field Services – Include services such as the following:

- Abandoning wells, oil or gas field
- Building board roads (as a contract service)
- Building drilling platforms on leases
- Building offshore drilling islands
- Clearing locations
- Crane work -- on leases
- Dirt work in oil or gas fields
- Dredging canals, driving keyways, construction work
- Drilling rat holes and mouse holes
- Fishing for tools
- Flooding and water injection
- General oil field contracting
- Lease maintenance
- Oil and gas well shooting
- Pipe line construction on leases; construction of gathering lines to point where distribution company takes over
- Pipe testing
- Plugging wells
- Preparation of drilling sites
- Rolling pipe, leveling, etc.
- Roustabout work
- Salt water disposal systems
- Sand blasting pipe lines on leases
- Servicing wells
- Vacuum truck service
- Water well drilling (on leases)

Item 19. MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS, BY DEPARTMENT, DURING 1967

Line 1. Operating and Maintaining Wells – Include all operation and maintenance activities for the production of oil and gas and transportation of oil from the well to the first lease tank and gas from the well to the delivery meter. For oil production, include field separation.

Line 2. Drilling Wells and Rig Building – Only direct drilling and rig building activities should be included in this item. **Include** drilling in, spudding in, tailing in, and reworking wells. Segregate, by estimate if necessary, and include on line 4 the man-hours for trucking on to location, and also for installing wellhead fittings and other work in connection with completion of wells.

Line 3. Exploration Work (except drilling wells) – Include such activities as geophysical exploration, geologic leasing, and scouting. Shot-hole drilling and core drilling should be also included.

Item 20A – See instructions on form.

Item 20B. WELLS DRILLED AND COMPLETED DURING 1967 – Report on **lines 1-4** data for **all wells drilled which you operated**, including both wells drilled for you by your own employees and wells drilled for you on contract by others. **Include** the cost of wells drilled and abandoned before completion during 1967. Report on **line 8** data for **all** oil, gas, dry, and service wells drilled for others on a contract, fee, or other basis and which you did not operate. **Include** both “turnkey” wells and all other wells for which you were the drilling contractor.

Include the cost of wells completed in 1967 although begun in 1966. **Exclude** the cost of drilling wells that were still in process of drilling or completion at the end of 1967. Costs for wells reported in this item usually should differ from such costs capitalized by the operator and reported in item 7. Item 20B represents total costs for wells completed in 1967, irrespective of when started, whereas item 7 includes only costs for work done in 1967 but covers costs for wells not yet completed at the end of 1967.

Report only the costs specified. Other costs such as taxes, interest on investment, overhead costs, etc. should not be included. Do not reduce costs by test well and dry hole contributions.

Columns (F) and (G). Payments to Contractors – If all wells were drilled and entirely completed on contract, with the contractor supplying the casing and other equipment (as on “turnkey” jobs), all figures should be reported in columns (F) and (G). If the amounts paid to contractors represented only the amounts paid for drilling wells on contract and you supplied the casing or other well equipment, the cost of this equipment should be reported in column (H). If part of the payment to contractors was in oil or gas, estimate carefully the value of this oil or gas and include it in the total amount paid to contractors.

Column (H). Cost of Casing, Tubing, and Well Equipment – Report the cost of all equipment chargeable to the wells reported in column (C) and necessary for production or capping. If any of the costs were in the form of payments to contractors, such payments should be segregated and reported in columns (F) or (G). **Include** costs for transportation of casing to the site of operations; for dry holes deduct the value of salvaged casing less the cost of salvaging. **Include** tubing, packers; wellhead fittings, such as Christmas tree and connections, tubing head, chokes, gauges, anchor clamps; and the cost of pumping derrick. If drilling derrick was left over well after completion and was used for production, exclude all costs of such derrick from cost of drilling (columns (F) and (I)) and report them in columns (H) or (G). **Do not include** here, but report separately in column (J), the cost of lease equipment beyond the Christmas tree, such as artificial lift equipment, oil and gas separators, heater-treaters, flow lines, and storage tanks.

Column (I). All Other Costs of Drilling and Equipping – Include the cost of labor, supplies, water, fuel, and power used in operations such as: moving on to location all equipment and supplies incidental to operations; excavating for derrick foundation; building derrick foundation; digging slush pit; erecting derrick and wiring same; building loading or pipe racks; laying fuel and water lines; rigging up; drilling hole; making straight-hole tests or surveys; coring; well logging and core analysis; testing formation; mud conditioning; reaming; running casing, screen, and liner; cleaning out; bailing; swabbing; fishing; repairing and maintaining rig or derrick; tearing down rig; dismantling derrick and racks; and moving equipment off location. Report the cost, including freight and express charges thereon, of all supplies used in the above operations, such as mud, weighting materials, and mud chemicals; lumber or timber for making forms, mud boxes, pipe racks, constructing derrick, etc.; cement, sand, and gravel; all rig-operating supplies such as oils, grease, packing, rope, firebrick, etc.; all drilling bits, reamers, and core heads; hand tools; iron and steel for derrick and for blacksmithing; cordage and wire lines; and any additional supplies necessary for the operation of either rotary or cable tool outfit. **Deduct** the value of materials salvaged after use. **Include** depreciation or amortization charges for the use of drilling machinery and tools; if the machinery and tools were rented, report the rentals thereon. Do not include the cost

of equipment chargeable to the well, but report it under columns (F), (G), and (H). Include the total cost of water, if purchased, or cost of water well if drilled and chargeable to oil or gas well drilling operations. Include also all fuel or power used in connection with these operations. If some of the fuel or power was not purchased, include a carefully estimated value of such fuel or power used.

Item 20C. WELLS DRILLED AND COMPLETED DURING 1967 WHICH YOU OPERATED, BY DEPTH RANGES – Wells may be separated between exploration and development on the basis of the definitions in the American Association of Petroleum Geologists Bulletin.

Item 21. See instructions on form.

Item 22. PERIOD OF REPORT – Enter the month and day of the beginning and the end of period your report covers. If a calendar year report: "From January 1 to December 31, 1967;" if a fiscal year, specify which (such as "From December 1, 1967 to November 30, 1967"). If a part-year report is submitted because the establishment was not in operation or under your company's control for the entire year, specify the actual period covered: For example, "January 1, 1967, to August 15, 1967" or "June 1 to December 31, 1967."

1967 CENSUS OF Mineral Industries



MIC67(1)-2

SUBJECT SERIES

Water Use in Mining

Issued June 1971



U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary

James T. Lynn, Under Secretary

Harold C. Passer, Assistant Secretary for Economic Affairs

BUREAU OF THE CENSUS George Hay Brown, Director

Contents

	page
Text	1
TABLE A Comparative Statistics for All Mineral Industries Establishments and Those Mineral Industries Establishments Using 20 Million Gallons or More of Water in 1968 . . .	2
1A Water Intake, Gross Water Used, and Water Discharged by Industry Group and Selected Industries: 1968 and 1954	3
1B Water Use in the Mineral Industries, by Geographic Division and State: 1954	5
2 Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—	
A. Industry Groups and Industries	6
B. States and Major Industry Groups	8
3 Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968	
A. Industry Groups and Industries	16
B. States and Major Industry Groups	18
4 Water Intake by Source and Purpose, 1968, and Gross Water Used and Water Discharged by Establishments Recirculating Water and Industry Groups: 1968 . .	26
5 Water Intake, Number of Establishments Recirculating Water, Gross Water Recirculated and Water Discharged by Point of Discharge for Establishments Recirculating Water: 1968	27
6 Water Intake, Water Treated Prior to Use and Number of Establishments Treating Water Prior to Use by Type of Treatment: 1968—	
A. Industry Groups and Industries	28
B. States and Major Industry Groups	30
7 Gross Water Used and Number of Establishments Treating Water Prior to Recirculation or Reuse by Type of Treatment: 1968—	
A. Industry Groups and Industries	32
B. States and Major Industry Groups	33
8 Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment—	
A. Industry Groups and Industries	35
B. States and Major Industry Groups	37
9 Water Intake by Purpose, Gross Water Used, and Water Treated and Discharged by Point of Discharge for Establishments Treating Water Prior to Discharge: 1968 .	41

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of reports on special subjects. Additional reports on special subjects such as size of establishment and type of operation will be published in this subject series. In addition to the subject series, 14 separate industry or industry group reports have been issued in the industry series, and an area series providing statistics for each State and the District of Columbia has also been issued.

These previously issued reports show figures for industries or States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used. In addition, the State reports contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The Introduction to the General Summary report of the 1967 Census of Mineral Industries discusses at greater length many of the subjects described briefly in this introduction. For example, the General Summary text discusses the economic significance of the mining sector; the relation of value added in mining to national income originating in mining; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations have been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments. A further limitation was placed on the number of establishments to be included in the 1968 survey on water use in the mineral industries. Only those establishments or reporting units indicating consumption of 20 million gallons or more of water in the 1967 Census of Mineral Industries were included in the 1968 water use survey.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more

complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. Water use shown for an industry, therefore, reflects not only the primary activities of the establishments in that industry but also their activities of a secondary nature.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures

for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST
New England
Middle Atlantic

SOUTH
South Atlantic
East South Central
West South Central

NORTH CENTRAL
East North Central
West North Central

WEST
Mountain
Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
SIC	Standard Industrial Classification

Water Use in the Mineral Industries: 1968

The total quantity of water used (including water recirculated or reused) by establishments in the mineral industries in the United States in 1968 was estimated at 3.7 trillion gallons, about 70 percent greater than the 2.2 trillion gallons used in 1954, the most recent year for which corresponding Census data are available. The 1968 total, when compared with the 1.4 trillion gallons of water intake representing water purchased from utilities or obtained from the company's private water supply source (including mine water), indicates that each gallon of water introduced into minerals producing activities was reused or recirculated 2.6 times before being discharged.

Of the 1.4 trillion gallons of water intake, 1.2 trillion gallons were discharged after being used, recirculated, or reused in minerals activities. Thus, for every 100 gallons of water intake in 1968, about 86 gallons were discharged, representing a slight increase over the 1954 discharge ratio of 83 gallons per each 100 gallons intake. Finally, of the 1.4 trillion gallons discharged in 1968, including mine water drained and discharged, almost 0.3 trillion gallons were treated prior to discharge, or 22 gallons of water treated per 100 gallons discharged. Corresponding data on water treated in 1954 are not available.

Establishments in Major Groups 10, Metal Mining, and 14, Nonmetallic Minerals, Except Fuels, were the largest users of water for mineral mining and processing purposes with an aggregate usage in 1968 of close to 1.0 trillion gallons, or 70 percent of total water intake in the mining sector. In 1954, these two industry groups also accounted for 70 percent of the total water intake in the minerals industries.

The 1968 data in this report are based on information obtained in a special survey conducted on Census Form MC-D-13B, Water Use in the Mineral Industries: 1968, copies of which were sent to those mineral establishments that indicated in the 1967 Census of Mineral Industries consumption of at least 20 million gallons of water during 1967. All such establishments were subsequently asked to report detailed data on water consumed for 1968 on Form MC-D-13B. The number of establishments reporting water consumption of 20 million gallons or more in 1968 totaled 1,800 and data reported by these plants are shown in the accompanying tables. For 1954, the coverage included all establishments using 10 million gallons or more per year. While the mineral industries in the United States are important users of water, the utilization by establishments in these industries is highly concentrated. For 1968, it is estimated that the 1,800 minerals establishments with an annual intake of 20 million gallons of water or more accounted for about 98 percent of water withdrawn for minerals producing and processing purposes. These plants, however, represent only 6.3 percent of all minerals establishments; employ about 33 percent of the total number of persons engaged in mining; and account for 55 percent of value added in mining.

Data are shown in this report for water intake by kind (fresh or brackish) and source (public or company system); mine water used; water intake and water recirculated or reused by purpose (process, cooling, and condensing, oil and gas field flooding, and other uses); water discharged by point of discharge (public sewer system, company disposal or storage system); mine water drained and discharged; and water treated by method of treatment.

TABLE A. Comparative Statistics for All Mineral Industries Establishments and Those Mineral Industries Establishments Using 20 Million Gallons or More of Water in 1968

Code	Industry group	Number of establishments			Number of employees			Value added in mining		
		Total	Reporting consumption of 20 million gallons or more of water		Total for all establishments (1,000)	In establishments reporting consumption of 20 million gallons or more of water		Total for all establishments (million dollars)	For establishments reporting consumption of 20 million gallons or more of water	
			Number	Percent of total		Number (1,000)	Percent of total		Value (million dollars)	Percent of total
	All industries, total.....	28,579	1,801	6.3	567.3	185.7	32.7	19,330.2	10,580.0	54.7
10	Metal mining.....	1,155	141	12.2	70.9	47.6	67.1	1,556.6	1,174.8	75.5
11	Anthracite mining.....	403	24	6.0	7.2	1.1	15.3	82.1	14.9	18.1
12	Bituminous coal and lignite mining.....	4,081	195	4.8	124.4	46.9	37.7	2,009.2	901.7	44.9
13	Oil and gas extraction.....	16,358	869	5.3	244.9	57.1	23.3	13,394.3	7,569.4	56.5
14	Nonmetallic minerals, except fuels.....	6,582	572	8.7	119.9	33.1	27.6	2,288.0	919.2	40.2

Note: See Appendix for definition of terms used. Data shown are based on the 1967 Census of Mineral Industries.

TABLE 1A. Water Intake, Gross Water Used, and Water Discharged by Industry Group and Selected Industries: 1968 and 1954

(Billion gallons)

Code	Industry group and industry	1968								
		Water intake				Gross water used, including water recirculated or reused	Water discharged			
		Total intake			Treated prior to use ¹		Total discharged			Treated prior to discharge ¹
		Total intake	Mine water used	Water (except mine water)			Total discharged	Mine water drained and discharged	Other water including mine water used	
	All industries, total.....	1,408	325	1,083	284	3,694	1,365	200	1,165	289
10	METAL MINING.....	499	27	472	25	1,202	500	67	433	65
1011	Iron ores.....	340	10	330	11	659	344	17	327	29
1021	Copper ores.....	109	7	102	11	447	68	3	65	12
1031	Lead and zinc ores.....	17	6	12	(Z)	21	54	40	14	8
104	Gold and silver ores.....	6	1	5	(Z)	11	7	1	6	1
106	Ferroalloy ores, except vanadium..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
109	Miscellaneous metal ores.....	21	3	18	3	51	19	2	17	12
1094	Uranium ores.....	7	2	5	2	11	7	1	6	3
1093	Titanium ores.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1099	Metallic ores, n.e.c.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	ANTHRACITE MINING.....	10	8	2	2	13	10	(Z)	10	5
12	BITUMINOUS COAL AND LIGNITE MINING.....	25	9	16	5	102	60	40	20	6
13	OIL AND GAS EXTRACTION.....	390	130	260	159	1,467	367	² 47	320	67
1311	Crude petroleum and natural gas ³	269	⁴ 130	139	138	318	265	46	219	64
1321	Natural gas liquids.....	120	-	120	21	1,148	99	(Z)	99	3
138	Oil and gas field services.....	2	-	2	1	2	3	1	2	(Z)
14	NONMETALLIC MINERALS, EXCEPT FUELS.....	483	151	332	93	910	428	46	382	146
142	Crushed and broken stone.....	50	10	40	(Z)	58	73	26	47	18
1422	Crushed and broken limestone.....	43	9	33	(Z)	49	65	25	40	13
1423	Crushed and broken granite.....	3	1	2	(Z)	4	3	(Z)	3	1
1429	Crushed and broken stone, n.e.c.....	5	(Z)	5	(Z)	5	5	1	4	4
144	Sand and gravel.....	127	25	102	15	178	131	13	118	36
1442	Construction sand and gravel.....	105	20	85	8	135	109	10	100	27
1446	Industrial sand.....	22	5	18	7	43	22	3	19	9
145	Clay and related minerals.....	11	(Z)	11	1	13	12	2	10	7
1455	Kaolin and ball clay.....	6	(Z)	6	(Z)	6	8	2	5	5
1456	Feldspar.....	3	(Z)	3	-	3	3	-	3	2
147	Chemical and fertilizer minerals...	289	116	173	76	652	210	5	205	84
1474	Potash, soda, and borate minerals....	9	(Z)	8	2	57	7	-	7	-
1475	Phosphate rock.....	247	115	133	53	555	174	5	169	66
1476	Rock salt.....	6	-	6	1	10	6	(Z)	6	(Z)
1477	Sulfur.....	24	-	24	21	26	22	-	22	17
149	Miscellaneous nonmetallic minerals.	6	(Z)	6	(Z)	9	2	(Z)	2	1
1493	Mica.....	5	(Z)	5	-	5	1	-	1	(Z)

See footnotes at end of table.

TABLE 1A. Water Intake, Gross Water Used, and Water Discharged by Industry Group and Selected Industries: 1968 and 1954—Continued

(Billion gallons)

Code	Industry group and industry	1954						
		Water intake			Gross water used, including water recirculated or reused	Water discharged		
		Total	Mine water used	Water (except mine water)		Total	Mine water drained and discharged	Other water including mine water used
	All industries, total.....	722	150	572	2,170	985	389	596
10	METAL MINING.....	138	26	112	241	199	107	92
1011	Iron ores.....	27	6	21	60	67	51	16
1021	Copper ores.....	59	2	57	83	60	11	49
1031	Lead and zinc ores.....	22	10	13	38	47	36	11
104	Gold and silver ores.....	17	7	10	25	13	4	9
106	Ferroalloy ores, except vanadium..	8	1	7	14	8	3	5
109	Miscellaneous metal ores.....	4	(Z)	4	22	2	(Z)	2
1094	Uranium ores.....	2	(Z)	2	2	2	(Z)	2
1093	Titanium ores.....	-	-	-	-	-	-	-
1099	Metallic ores, n.e.c.....	3	-	3	20	1	(Z)	1
11	ANTHRACITE MINING.....	27	13	15	89	96	85	11
12	BITUMINOUS COAL AND LIGNITE MINING.....	29	7	22	116	161	147	14
13	OIL AND GAS EXTRACTION.....	158	-	158	1,138	225	-	225
1311	Crude petroleum and natural gas ³	82	-	82	⁵ 82	180	-	180
1321	Natural gas liquids.....	67	-	67	1,046	42	-	42
138	Oil and gas field services.....	9	-	9	⁵ 9	3	-	3
14	NONMETALLIC MINERALS, EXCEPT FUELS.....	369	104	265	587	303	49	254
142	Crushed and broken stone.....	60	20	40	66	78	39	38
1422	Crushed and broken limestone.....	54	19	35	58	71	37	34
1423	Crushed and broken granite.....	3	1	2	4	3	1	2
1429	Crushed and broken stone, n.e.c.....	3	(Z)	3	4	4	2	2
144	Sand and gravel.....	187	58	129	261	124	(Z)	124
1442	Construction sand and gravel.....	179	56	123	248	118	(Z)	118
1446	Industrial sand.....	8	1	6	13	6	(Z)	6
145	Clay and related minerals.....	7	1	5	9	8	3	5
1455	Kaolin and ball clay.....	4	(Z)	4	4	4	(Z)	4
1456	Feldspar.....	1	(Z)	1	1	1	(Z)	1
147	Chemical and fertilizer minerals...	113	(D)	(D)	247	90	6	84
1474	Potash, soda, and borate minerals...	11	(D)	(D)	26	6	(Z)	6
1475	Phosphate rock.....	63	23	40	138	41	-	41
1476	Rock salt.....	3	(D)	(D)	3	3	(Z)	3
1477	Sulfur.....	16	-	16	17	15	-	15
149	Miscellaneous nonmetallic minerals.	2	(D)	(D)	4	2	1	2
1493	Mica.....	1	(Z)	1	2	1	(Z)	1

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group. Data for 1968 include, but data for 1954 exclude, establishments located in Hawaii and Alaska.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 500 million gallons.

¹Included in total.

²Represents water produced with oil or gas and subsequently discharged.

³The 1968 figures for this industry include about 200 billion gallons of water used for flooding in oil and gas fields. The corresponding total for 1954 was 47 billion gallons.

⁴Represents water produced with oil or gas and subsequently used in crude petroleum or natural gas production.

⁵Estimated to be equivalent to total water intake.

TABLE 1B. Water Use in the Mineral Industries, by Geographic Division and State: 1954

Geographic division and State	Number of production and development workers	Value added in mining (\$1,000)	Water intake (except mine water)			Water discharged (except mine water) ¹ (million gallons)	Mine water (million gallons)		Gross water use, including recirculation (million gallons)	Percent of total water intake (except mine water) by principal source ²			
			Million gallons	Million gallons per production worker	Gallons per dollar value added		Used	Drained and discharged		Public water systems	Company surface water systems	Company ground water systems	Combinations and not specified
United States, total.....	647,141	³ 11,546,418	571,654	0.88	50	549,740	150,328	388,791	2,170,499	6	41	35	18
New England Division.....	3,456	32,104	6,268	1.81	195	6,196	1,952	189	10,867	1	82	8	9
Maine.....	292	1,809	99	0.34	55	99	-	-	139	-	91	7	2
New Hampshire.....	240	1,658	375	1.56	226	372	-	-	378	-	32	-	68
Vermont.....	1,187	10,600	397	0.33	37	383	70	110	469	2	60	7	31
Massachusetts.....	992	8,925	3,522	3.55	395	3,483	66	-	3,834	7	59	10	24
Rhode Island.....	140	1,109	264	1.89	238	254	2	-	269	8	92	-	-
Connecticut.....	605	8,003	1,611	2.66	201	1,605	1,814	79	5,778	-	59	29	12
Middle Atlantic Division.....	105,017	767,158	63,872	0.61	83	52,040	30,553	174,370	188,536	10	40	23	27
New York.....	7,641	96,838	14,005	1.83	145	12,350	2,925	2,218	25,426	6	64	16	14
New Jersey.....	3,479	³ 38,617	4,509	1.30	117	4,101	3,051	10,798	9,145	1	39	42	18
Pennsylvania.....	93,897	631,703	45,358	0.48	72	35,589	24,577	161,354	153,965	12	33	23	32
East North Central Division..	69,142	813,435	76,152	1.10	94	66,261	40,022	35,617	197,923	3	70	20	7
Ohio.....	17,508	166,825	10,109	0.58	61	8,850	21,150	2,639	52,781	15	39	32	14
Indiana.....	7,782	85,201	8,736	1.12	103	7,905	5,396	4,365	16,206	(⁴)	52	37	11
Illinois.....	26,627	375,191	20,496	0.77	55	15,938	7,309	12,595	65,132	2	71	20	7
Michigan.....	13,729	149,074	32,985	2.40	221	30,679	4,880	11,987	56,746	2	87	7	4
Wisconsin.....	3,496	37,144	3,826	1.09	103	2,889	1,287	4,031	7,058	3	32	55	10
West North Central Division..	43,170	785,763	41,925	0.97	53	40,221	12,602	41,098	112,110	8	55	21	16
Minnesota.....	13,849	290,205	10,202	0.74	35	7,835	4,920	34,353	31,695	26	46	27	1
Iowa.....	2,347	21,513	4,285	1.83	199	4,262	401	608	6,494	-	88	3	9
Missouri.....	6,697	³ 56,554	7,087	1.06	125	6,644	5,009	4,839	25,261	(⁴)	58	14	28
North Dakota.....	1,399	³ 7,151	883	0.63	123	585	344	-	1,296	-	47	21	32
South Dakota.....	2,497	³ 22,419	2,845	1.14	127	2,277	720	632	6,399	1	89	4	6
Nebraska.....	1,433	29,222	2,765	1.93	95	2,733	124	-	4,591	1	72	6	21
Kansas.....	14,948	358,699	13,858	0.93	39	15,886	1,084	666	36,374	5	39	33	23
South Atlantic Division.....	98,602	761,393	86,400	0.88	113	79,717	33,760	54,465	288,232	3	46	40	11
Delaware, Maryland, and the District of Columbia.....	1,804	17,941	3,977	2.20	222	3,931	109	201	4,595	33	16	32	19
Virginia.....	14,400	89,095	5,304	0.37	60	3,864	2,273	2,794	13,607	1	80	6	13
West Virginia.....	68,340	³ 513,492	18,215	0.27	35	15,034	1,667	47,444	86,529	1	85	7	7
North Carolina.....	3,322	³ 30,678	7,305	2.20	238	6,195	1,276	943	11,390	17	62	2	19
South Carolina.....	1,276	10,097	2,748	2.15	272	2,705	490	247	3,661	7	93	(⁴)	-
Georgia.....	3,928	32,724	5,861	1.49	179	5,696	551	580	7,817	(⁴)	42	43	15
Florida.....	5,532	³ 67,366	42,990	7.77	638	42,292	27,394	2,256	160,633	(⁴)	23	67	10
East South Central Division..	60,615	521,131	30,848	0.51	59	27,203	9,144	35,427	87,815	3	64	19	14
Kentucky.....	35,820	272,103	8,264	0.23	30	6,611	1,292	19,053	39,711	1	65	8	26
Tennessee.....	8,839	61,108	15,371	1.74	252	13,923	1,517	3,547	20,125	1	60	28	11
Alabama.....	12,880	³ 93,638	5,685	0.44	61	4,402	2,281	12,827	18,683	10	78	10	2
Mississippi.....	3,076	94,282	1,528	0.50	16	2,267	4,054	-	9,296	6	39	32	23
West South Central Division..	165,208	5,209,798	143,829	0.87	28	160,432	4,091	2,764	911,389	5	30	54	13
Arkansas.....	4,985	³ 107,904	3,816	0.77	35	3,552	513	868	27,329	-	34	50	16
Louisiana.....	29,474	984,473	42,345	1.44	43	61,686	2,017	-	95,122	-	53	37	10
Oklahoma.....	30,294	³ 584,357	17,866	0.59	31	11,117	686	497	171,918	4	27	46	23
Texas.....	100,455	3,533,064	79,802	0.79	23	84,077	875	167	617,020	7	13	67	13
Mountain Division.....	68,713	1,305,463	84,229	1.23	65	70,020	7,601	39,187	203,105	8	21	29	42
Montana.....	8,899	³ 82,867	7,739	0.87	93	6,180	253	4,087	8,449	16	6	2	76
Idaho.....	4,121	³ 38,558	5,584	1.36	145	5,312	1,230	4,501	7,019	-	85	12	3
Wyoming.....	7,460	³ 258,165	14,599	1.96	57	14,283	6	324	43,503	-	16	40	44
Colorado.....	10,840	³ 204,547	7,580	0.70	37	5,394	1,106	4,246	18,699	5	76	12	7
New Mexico.....	11,545	³ 338,096	7,867	0.68	23	2,844	1,690	477	60,077	4	28	62	6
Arizona.....	11,014	³ 178,139	13,715	1.25	77	10,648	999	4,422	23,458	27	3	47	23
Utah.....	10,249	³ 151,662	20,520	2.00	135	20,333	941	15,069	30,209	(⁴)	7	4	89
Nevada.....	4,585	³ 53,429	6,625	1.44	124	5,026	1,376	6,124	11,691	13	2	73	12
Pacific Division.....	33,218	1,350,173	38,131	1.15	28	47,650	10,603	5,674	170,524	10	29	48	13
Washington.....	2,515	³ 22,346	3,869	1.54	173	3,835	1,172	1,340	6,457	4	45	39	12
Oregon.....	1,280	12,646	1,830	1.43	145	1,823	649	80	2,536	25	32	14	29
California.....	29,423	³ 1,315,181	32,432	1.10	25	41,992	8,782	4,254	161,531	10	27	51	12

Standard notes: - Represents zero.

¹Excludes water used for flooding in oil and gas fields.²For the Crude Petroleum and Natural Gas Extraction industries, represents a distribution of fresh water intake only. The total water intake for these industries includes 38.3 billion gallons of brackish water.³Excludes figures for the Uranium-radium-vanadium ores industry.⁴Less than 0.5 percent.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968

A. INDUSTRY GROUPS AND INDUSTRIES

Code	Industry group and industry	(Water data in billion gallons)			Water intake by purpose				
		Establishments reporting consumption of water			All purposes		Process	Air conditioning	Steam, electric power generation
		All employees (1,000)	Value added in mining (million dollars)	Establishments (number)	Total	Treated prior to use			
	All mineral operations.....	185.7	10,580.0	1,801	1,408.1	283.7	879.5	1.1	114.8
10	Metal mining.....	47.6	1,174.8	141	499.1	25.1	361.7	.8	111.6
1011	Iron ores.....	18.8	554.1	47	340.1	11.1	231.2	.2	104.9
1021	Copper ores.....	15.0	353.9	29	109.3	10.5	98.7	.3	2.5
103	Lead and zinc ores.....	5.8	76.0	26	17.4	.2	9.4	.1	-
1032	Lead ores.....	3.2	35.8	9	8.6	.1	3.2	-	-
1033	Zinc ores.....	2.6	40.2	17	8.7	.1	6.2	.1	-
104	Gold and silver ores.....	2.9	35.8	9	6.4	.2	2.3	.2	3.5
109	Miscellaneous metal ores.....	4.3	134.2	25	21.2	3.0	16.2	.1	.8
1094	Uranium-radium-vanadium ores.....	3.3	121.5	14	7.3	2.4	5.2	(Z)	.8
11	Anthracite mining.....	1.1	14.9	24	10.4	1.8	10.4	-	-
12	Bituminous coal and lignite mining.....	46.9	901.7	195	25.0	4.7	24.1	-	-
13	Oil and gas extraction.....	57.1	7,569.4	869	390.4	159.5	30.1	(Z)	1.3
131	Crude petroleum and natural gas.....	47.9	6,871.9	582	269.0	138.0	29.0	(Z)	.6
1312	Crude petroleum.....	43.5	6,474.5	545	255.2	136.0	26.4	(Z)	.5
1313	Natural gas.....	4.4	397.4	37	13.8	2.0	2.6	-	.1
1321	Natural gas liquids.....	7.9	658.7	272	119.9	20.8	1.1	(Z)	.7
138	Oil and gas field services.....	1.4	38.9	15	1.5	.7	(Z)	-	-
14	Nonmetallic minerals, except fuels.....	33.1	919.2	572	483.1	92.7	453.2	.2	1.9
141	Dimension stone.....	.1	2.5	4	.3	-	.3	-	-
142	Crushed and broken stone.....	7.5	138.9	127	50.1	.1	48.7	-	.3
1422	Crushed and broken limestone.....	5.3	97.7	81	42.6	.1	41.4	-	.3
1423	Crushed and broken granite.....	1.3	22.4	27	2.9	(Z)	2.9	-	-
1429	Crushed and broken stone, n.e.c. ....	.9	18.8	19	4.6	(Z)	4.4	-	-
144	Sand and gravel.....	8.3	152.0	350	127.3	15.2	125.8	-	.3
1442	Construction sand and gravel.....	6.6	121.3	315	105.1	8.3	104.2	-	.2
1443	Glass sand.....	1.1	20.5	16	17.2	6.1	16.6	-	.1
1444	Molding sand.....	.4	5.0	9	3.6	.8	3.6	-	-
1445	Industrial sand, n.e.c. ....	.3	5.2	10	1.4	-	1.4	-	-
145	Clay and related minerals.....	3.2	56.7	24	10.8	1.1	8.5	(Z)	1.1
1455	Kaolin and ball clay.....	2.0	38.7	8	6.0	.3	4.6	(Z)	1.1
1456	Feldspar.....	.3	4.0	6	2.8	-	2.8	-	-
1459	Clay and related minerals, n.e.c. ....	.2	5.1	6	.9	-	.5	-	-
147	Chemical and fertilizer minerals.....	12.4	540.2	55	288.5	76.2	264.2	.1	(Z)
1474	Potash, soda, and borate minerals.....	4.7	134.8	9	8.6	1.5	4.2	(Z)	(Z)
1475	Phosphate rock.....	3.8	111.9	18	247.3	53.2	235.2	(Z)	-
1476	Rock salt.....	1.0	28.9	4	6.1	.5	.2	.1	(Z)
1477	Sulfur.....	2.2	252.0	15	24.3	20.6	22.4	(Z)	-
149	Miscellaneous nonmetallic minerals.....	1.4	28.9	12	6.1	.1	5.6	-	.1
1493	Mica.....	.1	1.2	3	4.6	-	4.6	-	-

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

¹Represents water produced with oil or gas and subsequently discharged.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

A. INDUSTRY GROUPS AND INDUSTRIES

(Water data in billion gallons)

Code	Industry group and industry	Water intake by purpose—Continued			Establish- ments recirculating water (number)	Gross water used, including recirculation or reuse	Total water used and discharged	Mine water drained and discharged
		Other cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding				
	All mineral operations.....	149.7	32.8	230.1	943	3,694.0	1,165.4	200.0
10	Metal mining.....	10.3	14.5	-	104	1,201.6	433.6	67.1
1011	Iron ores.....	1.8	2.1	-	37	658.9	327.0	17.4
1021	Copper ores.....	1.9	6.0	-	26	446.9	65.0	3.2
103	Lead and zinc ores.....	3.2	4.6	-	17	20.8	13.9	40.0
1032	Lead ores.....	3.0	2.5	-	7	10.6	5.4	26.8
1033	Zinc ores.....	.3	2.2	-	10	10.2	8.5	13.2
104	Gold and silver ores.....	.2	.1	-	3	11.1	6.3	1.1
109	Miscellaneous metal ores.....	2.8	1.3	-	18	51.0	17.5	2.0
1094	Uranium-radium-vanadium ores.....	.1	1.2	-	9	10.8	5.9	1.1
11	Anthracite mining.....	-	(Z)	-	13	12.9	10.1	.4
12	Bituminous coal and lignite mining.....	.1	.9	-	132	102.1	19.3	39.0
13	Oil and gas extraction.....	119.0	9.8	230.1	403	1,467.2	320.1	¹ 47.2
131	Crude petroleum and natural gas.....	8.7	3.7	227.0	151	317.9	219.6	46.1
1312	Crude petroleum.....	6.7	3.6	217.9	146	299.8	206.6	44.8
1313	Natural gas.....	2.0	(Z)	9.0	5	18.1	13.0	1.3
1321	Natural gas liquids.....	110.3	6.0	1.9	250	1,147.7	99.1	(Z)
138	Oil and gas field services.....	.1	.2	1.2	2	1.6	1.5	1.2
14	Nonmetallic minerals, except fuels.....	20.3	7.7	-	291	910.3	382.3	46.4
141	Dimension stone.....	-	-	-	3	.4	.3	-
142	Crushed and broken stone.....	.1	1.0	-	50	58.3	47.2	26.1
1422	Crushed and broken limestone.....	.1	.8	-	31	49.2	40.0	25.1
1423	Crushed and broken granite.....	-	-	-	13	4.2	2.7	.1
1429	Crushed and broken stone, n.e.c.	(Z)	.2	-	6	4.9	4.5	.9
144	Sand and gravel.....	.5	.7	-	178	177.5	118.4	12.5
1442	Construction sand and gravel.....	.1	.6	-	154	134.9	99.7	9.7
1443	Glass sand.....	.4	(Z)	-	11	32.3	13.9	2.6
1444	Molding sand.....	-	-	-	6	7.0	3.5	-
1445	Industrial sand, n.e.c.	-	-	-	7	3.4	1.3	.2
145	Clay and related minerals.....	.9	.3	-	12	13.3	9.9	2.4
1455	Kaolin and ball clay.....	.1	.2	-	4	6.5	5.5	2.4
1456	Feldspar.....	-	-	-	1	3.4	2.7	-
1459	Clay and related minerals, n.e.c. ....	.4	(Z)	-	5	1.8	.7	-
147	Chemical and fertilizer minerals.....	18.6	5.4	-	42	651.7	204.7	5.3
1474	Potash, soda, and borate minerals.....	2.3	1.9	-	8	56.8	6.6	-
1475	Phosphate rock.....	11.3	.8	-	17	554.6	169.0	5.0
1476	Rock salt.....	5.0	.9	-	3	10.2	6.0	(Z)
1477	Sulfur.....	-	1.9	-	6	25.8	21.6	-
149	Miscellaneous nonmetallic minerals.....	.1	.2	-	6	9.0	1.8	(Z)
1493	Mica.....	-	-	-	1	4.6	.5	-

Standard notes: - Represents zero. (Z) Less than 50 million gallons.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	(Water data in billion gallons)			Water intake by purpose				
		Establishments reporting consumption of water			All purposes		Process	Air conditioning	Steam, electric power generation
		All employees (1,000)	Value added in mining (million dollars)	Establishments (number)	Total	Treated prior to use			
	United States, total.....	185.7	10,580.0	1,801	1,408.1	283.7	879.5	1.1	114.8
	New England Division.....	.4	6.6	27	3.5	-	3.5	-	-
	Maine.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	New Hampshire.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Massachusetts.....	.2	3.4	15	1.4	-	1.4	-	-
14	Nonmetallic minerals, except fuels.....	.2	3.4	15	1.4	-	1.4	-	-
	Rhode Island.....	.1	.8	3	.2	-	.2	-	-
14	Nonmetallic minerals, except fuels.....	.1	.8	3	.2	-	.2	-	-
	Connecticut.....	.1	1.9	5	1.7	-	1.7	-	-
11	Nonmetallic minerals, except fuels.....	.1	1.9	5	1.7	-	1.7	-	-
	Middle Atlantic Division.....	17.7	285.2	147	60.3	8.1	54.6	(Z)	.1
	New York.....	2.5	52.6	45	14.3	.5	13.6	(Z)	-
10	Metal mining.....	1.3	27.4	4	6.8	-	6.6	(Z)	-
13	Oil and gas extraction.....	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	-	-
	New Jersey.....	.6	10.7	16	15.1	(Z)	14.8	-	(Z)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pennsylvania.....	14.6	221.8	86	30.9	7.6	26.2	(Z)	.1
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	Anthracite mining.....	.9	8.9	22	9.5	1.8	9.4	-	-
12	Bituminous coal and lignite mining.....	9.3	145.1	33	2.5	.8	2.4	-	-
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	1.8	32.2	22	13.5	2.1	13.3	-	.1
	East North Central Division.....	20.0	562.5	236	95.5	27.0	71.1	-	.9
	Ohio.....	3.4	66.8	72	16.1	1.3	15.5	-	(Z)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
14	Nonmetallic minerals, except fuels.....	1.4	30.7	61	15.5	.9	14.9	-	(Z)
	Indiana.....	1.9	63.4	43	11.7	1.0	9.5	-	.3
12	Bituminous coal and lignite mining.....	1.3	45.8	8	3.8	-	3.8	-	-
13	Oil and gas extraction.....	.1	8.8	11	1.4	1.0	-	-	-
14	Nonmetallic minerals, except fuels.....	.4	8.7	24	6.5	(Z)	5.7	-	.3
	Illinois.....	7.3	231.2	75	29.7	20.3	11.7	-	-
12	Bituminous coal and lignite mining.....	4.9	119.1	27	5.0	2.6	4.9	-	-
13	Oil and gas extraction.....	1.6	99.3	29	17.9	16.5	(Z)	-	-
14	Nonmetallic minerals, except fuels.....	.7	12.8	19	6.8	1.2	6.8	-	-
	Michigan.....	7.2	194.1	34	35.0	4.3	32.6	-	.5
10	Metal mining.....	5.5	152.0	13	20.5	.2	19.2	-	.5
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	-
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	-	-
14	Nonmetallic minerals, except fuels.....	1.3	28.7	15	12.9	3.8	12.4	-	(Z)
	Wisconsin.....	.3	6.9	12	2.9	.1	1.9	-	-
10	Metal mining.....	.1	2.7	4	2.1	.1	1.2	-	-
14	Nonmetallic minerals, except fuels.....	.2	4.2	8	.9	-	.7	-	-
	West North Central Division.....	17.3	615.0	162	352.3	18.6	228.1	.3	104.9
	Minnesota.....	9.7	301.1	37	314.2	7.2	207.0	.2	104.9
10	Metal mining.....	9.3	296.1	22	312.3	7.2	205.1	.2	104.9
14	Nonmetallic minerals, except fuels.....	.4	5.0	15	1.9	-	1.9	-	-

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Water intake by purpose—Continued			Establishments recirculating water (number)	Gross water used, including recirculation or reuse	Total water used and discharged	Mine water drained and discharged
		Other cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding				
	United States, total.....	149.7	32.8	230.1	943	3,694.0	1,165.4	¹ 200.0
	New England Division.....	(Z)	(Z)	-	9	3.9	3.3	-
	Maine.....	(D)	(D)	-	(D)	(D)	(D)	-
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	-
	New Hampshire.....	(D)	(D)	-	(D)	(D)	(D)	-
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	-
	Massachusetts.....	(Z)	(Z)	-	8	1.8	1.3	-
14	Nonmetallic minerals, except fuels.....	(Z)	(Z)	-	8	1.8	1.3	-
	Rhode Island.....	-	-	-	-	-	-	-
14	Nonmetallic minerals, except fuels.....	-	-	-	-	-	-	-
	Connecticut.....	(Z)	-	-	1	1.8	1.6	-
14	Nonmetallic minerals, except fuels.....	(Z)	-	-	1	1.8	1.6	-
	Middle Atlantic Division.....	1.6	.8	3.2	82	104.6	8.2	27.0
	New York.....	.2	.2	.3	25	20.8	9.8	1.1
10	Metal mining.....	.2	.1	-	4	11.8	2.5	.3
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	New Jersey.....	(Z)	.3	-	9	26.6	10.7	1.3
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pennsylvania.....	1.4	.3	2.9	48	57.2	27.8	24.6
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
11	Anthracite mining.....	-	(Z)	-	11	11.6	9.2	.4
12	Bituminous coal and lignite mining.....	(Z)	.1	-	21	17.1	2.0	10.6
13	Oil and gas extraction.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(Z)	.1	-	12	19.5	12.3	3.7
	East North Central Division.....	1.1	2.4	20.0	114	226.7	80.9	19.7
	Ohio.....	(Z)	.6	-	23	21.8	15.9	5.5
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(Z)	.6	-	18	20.9	15.4	4.9
	Indiana.....	.4	.1	1.4	27	20.5	10.5	.1
12	Bituminous coal and lignite mining.....	-	-	-	8	9.4	3.2	-
13	Oil and gas extraction.....	-	-	1.4	3	1.5	1.2	-
14	Nonmetallic minerals, except fuels.....	.4	.1	-	16	9.6	6.0	.1
	Illinois.....	(Z)	.1	17.9	44	50.8	22.4	.5
12	Bituminous coal and lignite mining.....	-	.1	-	24	19.8	4.0	.2
13	Oil and gas extraction.....	-	-	17.9	8	21.4	11.8	(Z)
14	Nonmetallic minerals, except fuels.....	(Z)	(Z)	-	12	9.5	6.6	.3
	Michigan.....	.7	.6	.7	14	130.0	29.3	11.5
10	Metal mining.....	.3	.5	-	8	114.7	15.6	5.0
12	Bituminous coal and lignite mining.....	-	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	-	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	.4	(Z)	-	4	13.4	12.4	6.3
	Wisconsin.....	(Z)	1.0	-	6	3.6	2.9	2.1
10	Metal mining.....	-	.8	-	2	2.6	2.1	1.9
14	Nonmetallic minerals, except fuels.....	(Z)	.2	-	4	1.0	.9	.2
	West North Central Division.....	2.0	3.7	13.3	89	613.5	341.8	26.3
	Minnesota.....	.5	1.8	-	24	518.0	309.7	10.7
10	Metal mining.....	.5	1.8	-	18	515.5	307.8	10.7
14	Nonmetallic minerals, except fuels.....	-	(Z)	-	6	2.5	1.9	-

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	(Water data in billion gallons)			Water intake by purpose				
		Establishments reporting consumption of water			All purposes		Process	Air conditioning	Steam, electric power generation
		All employees (1,000)	Value added in mining (million dollars)	Establishments (number)	Total	Treated prior to use			
	West North Central Division--Continued								
	Iowa.....	.4	7.4	31	10.7	(Z)	10.7	-	(Z)
14	Nonmetallic minerals, except fuels.....	.4	7.4	31	10.7	(Z)	10.7	-	(Z)
	Missouri.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	North Dakota.....	.4	42.9	8	2.7	1.3	.3	-	-
13	Oil and gas extraction.....	.4	42.2	5	2.4	1.3	-	-	-
14	Nonmetallic minerals, except fuels.....	.1	.8	3	.3	-	.3	-	-
	South Dakota.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nebraska.....	.2	12.3	14	1.4	.7	.3	-	-
13	Oil and gas extraction.....	.1	12.0	11	1.1	.7	-	-	-
14	Nonmetallic minerals, except fuels.....	(Z)	.3	3	.3	-	.3	-	-
	Kansas.....	1.9	189.5	57	16.5	7.2	3.7	-	(Z)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
13	Oil and gas extraction.....	1.8	188.0	52	14.6	7.2	1.8	-	(Z)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
	South Atlantic Division.....	31.0	571.4	193	313.2	58.2	291.6	.1	1.1
	Delaware.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Maryland.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	District of Columbia.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Virginia.....	3.5	65.9	15	6.3	.6	3.5	(Z)	-
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
14	Nonmetallic minerals, except fuels.....	.6	9.5	8	2.0	-	1.9	-	-
	West Virginia.....	17.8	304.7	77	10.7	.6	6.1	-	-
12	Bituminous coal and lignite mining.....	16.8	277.7	66	5.4	.3	5.0	-	-
13	Oil and gas extraction.....	.5	18.5	6	4.0	.2	-	-	-
14	Nonmetallic minerals, except fuels.....	.5	8.5	5	1.3	(Z)	1.1	-	-
	North Carolina.....	1.2	14.9	18	31.8	2.0	20.8	(Z)	-
14	Nonmetallic minerals, except fuels.....	1.2	14.9	18	31.8	2.0	20.8	(Z)	-
	South Carolina.....	.7	9.9	16	4.7	1.0	4.7	-	(Z)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
	Georgia.....	3.6	65.2	34	14.1	1.1	12.2	(Z)	1.1
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Florida.....	4.1	107.2	28	238.3	52.9	237.2	(Z)	-
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
14	Nonmetallic minerals, except fuels.....	3.8	96.6	24	235.7	52.9	234.8	(Z)	-
	East South Central Division.....	13.3	347.8	95	34.6	4.5	28.2	(Z)	(Z)
	Kentucky.....	6.4	157.1	41	8.5	2.5	5.9	-	-
12	Bituminous coal and lignite mining.....	4.9	112.2	22	3.4	.3	3.3	-	-
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Water intake by purpose--Continued			Establish- ments recirculating water (number)	Gross water used, including recirculation or reuse	Total water used and discharged	Mine water drained and discharged
		Other cooling and condensing	Boiler feed sanitary service, and other uses	Oil and gas field flooding				
	West North Central Division--Continued							
	Iowa.....	(Z)	(Z)	-	23	15.3	10.5	2.0
14	Nonmetallic minerals, except fuels.....	(Z)	(Z)	-	23	15.3	10.5	2.0
	Missouri.....	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	North Dakota.....	(Z)	(Z)	2.4	1	2.8	2.7	-
13	Oil and gas extraction.....	(Z)	(Z)	2.4	-	2.4	2.4	-
14	Nonmetallic minerals, except fuels.....	-	(Z)	-	1	.4	.3	-
	South Dakota.....	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Nebraska.....	(Z)	.1	1.0	5	2.5	1.2	.3
13	Oil and gas extraction.....	(Z)	.1	1.0	2	2.0	.9	.3
14	Nonmetallic minerals, except fuels.....	-	-	-	3	.5	.3	-
	Kansas.....	1.2	1.8	9.8	26	58.2	12.3	.3
12	Bituminous coal and lignite mining.....	-	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	1.2	1.8	9.8	24	55.8	10.4	.3
14	Nonmetallic minerals, except fuels.....	-	(D)	(D)	(D)	(D)	(D)	(D)
	South Atlantic Division.....	17.9	2.2	.3	116	683.7	225.3	46.7
	Delaware.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Maryland.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	District of Columbia.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Virginia.....	2.7	.2	-	12	22.6	6.1	4.0
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(Z)	(Z)	-	6	3.7	2.0	(Z)
	West Virginia.....	3.8	.6	-	51	37.5	8.7	19.6
12	Bituminous coal and lignite mining.....	.1	.4	-	46	22.1	3.5	19.3
13	Oil and gas extraction.....	3.8	.1	.2	3	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(Z)	.2	-	2	(D)	(D)	(D)
	North Carolina.....	10.9	.2	-	5	56.4	27.2	12.2
14	Nonmetallic minerals, except fuels.....	10.9	.2	-	5	56.4	27.2	12.2
	South Carolina.....	(Z)	(Z)	-	11	7.4	4.6	.7
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Georgia.....	.5	.3	-	16	36.8	12.7	2.6
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Florida.....	-	1.0	-	17	515.2	158.9	7.5
10	Metal mining.....	-	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	-	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	.9	-	15	511.3	157.4	7.5
	East South Central Division.....	1.3	.3	4.8	46	63.4	31.5	7.9
	Kentucky.....	.2	.1	2.3	23	22.8	7.0	.3
12	Bituminous coal and lignite mining.....	(Z)	.1	-	14	11.2	2.9	.3
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)										
Code	State and major industry group	Establishments reporting consumption of water			Water intake by purpose					
		All employees (1,000)	Value added in mining (million dollars)	Estab-lishments (number)	All purposes		Process	Air con- ditioning	Steam electric power generation	
					Total	Treated prior to use				
	East South Central Division--Continued									
	Tennessee.....	1.8	39.8	14	13.3	.1	12.0	(Z)	-	-
10	Metal mining.....	1.4	21.5	5	4.0	(Z)	3.3	-	-	-
14	Nonmetallic minerals, except fuels.....	.4	18.4	9	9.3	.1	8.7	(Z)	-	-
	Alabama.....	3.8	85.2	24	4.0	.5	3.3	-	(Z)	(Z)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
12	Bituminous coal and lignite mining.....	2.9	64.2	9	1.6	.1	1.5	-	-	-
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
14	Nonmetallic minerals, except fuels.....	.4	5.9	7	.9	-	.9	-	-	-
	Mississippi.....	1.2	65.7	16	8.8	1.4	6.9	-	-	-
13	Oil and gas extraction.....	1.0	63.0	10	2.3	1.4	.4	-	-	-
14	Nonmetallic minerals, except fuels.....	.2	2.7	6	6.5	-	6.5	-	-	-
	West South Central Division.....	40.5	6,088.1	601	301.9	103.6	54.1	.1	.8	.8
	Arkansas.....	.8	47.9	22	4.8	2.9	3.0	(Z)	-	-
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
13	Oil and gas extraction.....	.3	35.6	13	2.5	1.5	.6	(Z)	-	-
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Louisiana.....	12.2	2,601.6	98	127.6	14.8	19.4	.1	.2	.2
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Oklahoma.....	7.3	574.0	95	41.2	22.0	1.9	-	.2	.2
13	Oil and gas extraction.....	7.2	572.6	92	40.4	22.0	1.1	-	.2	.2
14	Nonmetallic minerals, except fuels.....	.1	1.4	3	.8	-	.8	-	-	-
	Texas.....	20.2	2,864.6	386	128.3	63.9	29.8	(Z)	.3	.3
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	17.7	2,736.8	347	104.1	46.2	7.7	(Z)	.3	.3
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Mountain Division.....	30.6	1,174.3	193	171.4	36.4	112.5	.5	6.5	6.5
	Montana.....	2.4	50.8	16	7.2	3.7	5.6	(Z)	-	-
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	.2	27.2	10	1.7	1.1	.2	-	-	-
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Idaho.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Wyoming.....	3.1	199.5	30	19.6	8.6	4.1	-	.1	.1
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
13	Oil and gas extraction.....	1.0	140.9	21	16.1	7.0	1.3	-	(Z)	(Z)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
	Colorado.....	2.7	112.1	23	12.6	5.3	6.1	(Z)	.8	.8
10	Metal mining.....	1.4	36.8	6	7.8	1.2	5.6	(Z)	.8	.8
12	Bituminous coal and lignite mining.....	.8	17.5	3	.1	-	.1	-	-	-
13	Oil and gas extraction.....	.5	56.9	10	4.2	4.1	-	-	-	-
14	Nonmetallic minerals, except fuels.....	(Z)	.8	4	.5	-	.5	-	-	-
	New Mexico.....	8.0	381.2	68	20.6	7.9	8.5	(Z)	.2	.2
10	Metal mining.....	2.6	54.8	7	5.9	.8	5.3	-	.2	.2
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	3.0	281.2	54	10.3	6.8	.3	(Z)	(Z)	(Z)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Arizona.....	7.8	246.8	17	30.7	5.5	26.8	.3	1.2	1.2
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Water intake by purpose—Continued			Establish- ments recirculating water (number)	Gross water used, including recirculation or reuse	Total water used and discharged	Mine water drained and discharged
		Other cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding				
	East South Central Division—Continued							
	Tennessee.....	1.2	.1	-	9	24.7	12.2	.6
10	Metal mining.....	.6	(Z)	-	3	4.5	3.8	.6
14	Nonmetallic minerals, except fuels.....	.5	.1	-	6	20.1	8.4	-
	Alabama.....	(Z)	(D)	(D)	10	6.8	3.4	6.6
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(Z)	.1	-	4	3.8	1.6	3.2
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	(Z)	-	4	1.2	.9	1.9
	Mississippi.....	(Z)	(D)	(D)	4	9.2	8.8	.4
13	Oil and gas extraction.....	(Z)	(D)	(D)	-	2.3	2.3	.4
14	Nonmetallic minerals, except fuels.....	-	(Z)	-	4	7.0	6.5	-
	West South Central Division.....	108.3	7.5	131.1	316	1,179.2	265.4	36.2
	Arkansas.....	.3	(Z)	1.6	9	10.2	4.4	.9
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	.3	(Z)	1.6	4	6.7	2.2	.9
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Louisiana.....	93.3	1.1	13.5	38	268.9	119.5	20.9
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Oklahoma.....	1.2	.4	37.4	62	121.3	35.1	1.0
13	Oil and gas extraction.....	1.2	.4	37.4	60	119.4	34.3	1.0
14	Nonmetallic minerals, except fuels.....	-	(Z)	-	2	1.9	.8	-
	Texas.....	13.5	6.0	78.6	207	778.9	106.4	13.3
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	13.5	4.1	78.6	181	748.3	84.6	13.0
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Mountain Division.....	13.2	13.2	25.4	108	645.2	118.8	28.0
	Montana.....	(Z)	.1	1.5	6	17.6	6.4	1.9
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(Z)	(Z)	1.5	2	1.8	1.7	.4
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Idaho.....	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Wyoming.....	6.3	.4	8.8	13	40.1	18.2	6.7
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	6.0	(Z)	8.7	7	18.9	15.3	5.3
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Colorado.....	.4	1.2	4.0	15	34.0	10.8	1.3
10	Metal mining.....	.2	1.1	-	5	17.3	6.3	.6
12	Bituminous coal and lignite mining.....	-	(Z)	-	-	.1	(Z)	.5
13	Oil and gas extraction.....	.1	.1	4.0	6	15.8	4.0	.1
14	Nonmetallic minerals, except fuels.....	-	-	-	4	.7	.5	-
	New Mexico.....	1.9	2.1	7.8	41	140.7	15.2	1.1
10	Metal mining.....	(Z)	.4	-	5	33.3	3.5	.7
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	1.7	.5	7.8	30	94.2	8.6	.5
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Arizona.....	.2	2.2	-	17	164.6	16.1	.7
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Establishments reporting consumption of water			Water intake by purpose				
		All employees (1,000)	Value added in mining (million dollars)	Establishments (number)	All purposes		Process	Air conditioning	Steam, electric power generation
					Total	Treated prior to use			
	Mountain Division--Continued								
	Utah.....	3.1	124.7	21	37.5	3.3	31.9	(Z)	.5
10	Metal mining.....	2.0	45.3	6	33.0	1.0	30.8	(Z)	.5
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	.2	60.9	9	3.4	2.2	(Z)	-	-
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nevada.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pacific Division.....	15.0	929.2	147	75.3	27.3	35.7	(Z)	.6
	Washington.....	.5	6.5	11	4.1	.2	4.0	-	(Z)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	.3	4.4	8	3.6	.2	3.6	-	(Z)
	Oregon.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	California.....	14.3	911.3	130	67.8	27.1	28.3	(Z)	.5
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	8.5	712.1	68	49.1	26.1	12.7	(Z)	.3
14	Nonmetallic minerals, except fuels.....	4.1	135.6	56	15.5	.9	12.9	(Z)	.1
	Alaska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Detailed figures may not add to totals because of independent rounding.

TABLE 2. Water Intake by Purpose, Gross Water Used, and Water Discharged: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Water intake by purpose—Continued			Establish- ments recirculating water (number)	Gross water used, including recirculation or reuse	Total water used and discharged	Mine water drained and discharged
		Other cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding				
	Mountain Division--Continued							
	Utah.....	1.4	.5	3.3	8	199.0	14.4	14.7
10	Metal mining.....	1.2	.4	-	3	192.4	10.7	14.2
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	.1	(Z)	3.3	2	3.9	3.3	.2
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Nevada.....	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	Pacific Division.....	4.2	2.7	32.1	63	173.8	50.2	8.1
	Washington.....	(Z)	(Z)	(Z)	2	4.2	3.8	.9
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(Z)	(Z)	-	1	3.7	3.4	.6
	Oregon.....	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	(D)
	California.....	4.2	2.7	32.1	59	165.9	42.8	6.8
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	1.9	2.0	32.1	30	103.1	26.9	3.5
14	Nonmetallic minerals, except fuels.....	1.9	.6	-	25	56.9	13.2	-
	Alaska.....	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	-	(D)	(D)	(D)	(D)

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 50 million gallons.

¹Includes 47 billion gallons of water produced with oil or gas and subsequently discharged.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968

A. INDUSTRY GROUPS AND INDUSTRIES

(Water data in billion gallons)

Code	Industry group and industry	Value of shipments (million dollars)	Water intake by kind and source							
			Total	By kind		Public water system	By source			Mine water used
				Fresh	Brackish		Company water system			
							Surface	Ground	Tidewater	
	All mineral operations.....	14,190.1	1,408.1	1,089.0	319.1	49.3	688.6	314.1	31.1	325.0
10	Metal mining.....	1,737.1	499.1	459.4	39.7	5.1	390.3	76.8	-	26.9
1011	Iron ores.....	802.7	340.1	339.8	.3	.6	326.8	2.9	-	9.8
1021	Copper ores.....	563.8	109.3	71.2	38.1	3.9	36.2	62.3	-	7.0
103	Lead and zinc ores.....	98.7	17.4	17.4	-	.5	6.8	4.5	-	5.5
1032	Lead ores.....	48.2	8.6	8.6	-	.4	1.4	4.5	-	2.3
1033	Zinc ores.....	50.5	8.7	8.7	-	(Z)	5.4	.1	-	3.2
104	Gold and silver ores.....	45.2	6.4	6.3	.1	-	4.3	1.1	-	1.0
109	Miscellaneous metal ores.....	196.5	21.2	20.5	.7	.2	12.7	5.8	-	2.5
1094	Uranium-radium-vanadium ores.....	176.8	7.3	6.7	.7	.2	3.3	2.0	-	(D)
11	Anthracite mining.....	41.8	10.4	4.0	6.4	1.7	.4	(Z)	-	8.3
12	Bituminous coal and lignite mining.....	1,286.5	25.0	23.2	1.8	1.8	13.1	1.5	(Z)	8.6
13	Oil and gas extraction.....	9,984.9	390.4	158.9	231.6	30.6	82.5	133.3	13.7	¹ 130.3
131	Crude petroleum and natural gas.....	7,411.9	269.0	63.5	205.5	15.6	7.1	104.6	12.1	¹ 129.7
1312	Crude petroleum.....	6,997.3	255.2	60.6	194.6	15.5	6.1	101.4	6.7	125.5
1313	Natural gas.....	414.5	13.8	2.9	10.9	(Z)	1.0	3.2	5.4	4.2
1321	Natural gas liquids.....	2,521.2	119.9	94.2	25.7	15.0	75.4	27.6	1.6	.3
138	Oil and gas field services.....	51.9	1.5	1.1	.4	.1	.1	1.1	-	.3
14	Nonmetallic minerals, except fuels.....	1,139.8	483.1	443.4	39.7	10.0	202.4	102.5	17.4	150.8
141	Dimension stone.....	2.9	.3	.2	.1	-	.2	-	.1	-
142	Crushed and broken stone.....	189.7	50.1	47.0	3.2	5.1	19.1	12.2	3.7	10.0
1422	Crushed and broken limestone.....	132.4	42.6	40.0	2.6	5.1	16.3	11.8	.3	9.1
1423	Crushed and broken granite.....	31.2	2.9	2.9	-	-	2.0	.2	-	.8
1429	Crushed and broken stone, n.e.c.	26.2	4.6	4.1	.5	(Z)	.7	.3	3.4	.1
144	Sand and gravel.....	193.5	127.3	106.0	21.2	1.4	73.5	21.1	6.4	24.9
1442	Construction sand and gravel.....	151.7	105.1	85.8	19.3	1.3	59.7	17.5	6.4	20.2
1443	Glass sand.....	26.6	17.2	15.4	1.7	.1	9.5	2.8	-	4.7
1444	Molding sand.....	8.3	3.6	3.6	-	-	3.4	.2	-	-
1445	Industrial sand, n.e.c.	6.8	1.4	1.2	.2	-	.8	.5	-	-
145	Clay and related minerals.....	79.2	10.8	10.4	.4	1.5	3.3	5.9	(Z)	.1
1455	Kaolin and ball clay.....	52.1	6.0	6.0	-	(Z)	.2	5.8	-	.1
1456	Feldspar.....	5.6	2.8	2.8	-	1.5	1.3	-	-	(Z)
1459	Clay and related minerals, n.e.c.	7.9	.9	.5	.4	(Z)	.8	.1	(Z)	-
147	Chemical and fertilizer minerals.....	637.0	288.5	273.9	14.6	1.8	100.9	62.9	7.1	115.9
1474	Potash, soda, and borate minerals.....	161.7	8.6	4.1	4.5	-	.6	7.8	-	.1
1475	Phosphate rock.....	151.1	247.3	247.3	-	.1	86.2	46.3	-	114.7
1476	Rock salt.....	32.7	6.1	1.2	5.0	.6	1.8	.6	3.2	-
1477	Sulfur.....	271.1	24.3	19.1	5.2	1.0	11.4	8.0	3.9	-
149	Miscellaneous nonmetallic minerals.....	37.5	6.1	6.0	.1	.2	5.4	.5	-	(Z)
1493	Mica.....	1.7	4.6	4.6	-	(Z)	4.5	(Z)	-	(Z)

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

A. INDUSTRY GROUPS AND INDUSTRIES

(Water data in billion gallons)

Code	Industry group and industry	Gross water used, including re-circulation or reuse	Water used and discharged by point of discharge						Mine water drained and discharged	Water treated prior to discharge
			Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users		
	All mineral operations.....	3,694.0	1,165.4	7.1	777.4	85.3	272.0	23.5	200.0	289.0
10	Metal mining.....	1,201.6	433.6	.6	384.7	(Z)	47.3	.9	67.1	65.4
1011	Iron ores.....	658.9	327.0	.3	323.2	-	3.4	-	17.4	28.8
1021	Copper ores.....	446.9	65.0	.2	25.6	-	38.6	.7	3.2	11.9
103	Lead and zinc ores.....	20.8	13.9	(Z)	11.8	-	2.0	.1	40.0	8.3
1032	Lead ores.....	10.6	5.4	(Z)	5.3	-	(Z)	.1	26.8	3.8
1033	Zinc ores.....	10.2	8.5	(Z)	6.5	-	1.9	(Z)	13.2	4.5
104	Gold and silver ores.....	11.1	6.3	.1	6.0	-	.3	-	1.1	.7
109	Miscellaneous metal ores.....	51.0	17.5	.1	15.0	(Z)	2.3	.2	2.0	11.9
1094	Uranium-radium-vanadium ores.....	10.8	5.9	(Z)	3.6	(Z)	2.1	.2	1.1	3.0
11	Anthracite mining.....	12.9	10.1	-	5.2	-	4.9	-	.4	4.6
12	Bituminous coal and lignite mining.....	102.1	19.3	.1	13.9	-	3.3	2.1	39.0	6.3
13	Oil and gas extraction.....	1,467.2	320.1	1.2	108.1	27.2	175.1	8.5	² 47.2	67.1
131	Crude petroleum and natural gas.....	317.9	219.6	1.2	21.7	21.3	168.6	6.8	46.1	63.7
1312	Crude petroleum.....	299.8	206.6	1.2	19.8	15.7	163.1	6.8	44.8	59.8
1313	Natural gas.....	18.1	13.0	-	1.9	5.7	5.4	(Z)	1.3	4.0
1321	Natural gas liquids.....	1,147.7	99.1	(Z)	86.3	5.8	5.3	1.6	(Z)	3.1
138	Oil and gas field services.....	1.6	1.5	-	.2	(Z)	1.2	(Z)	1.2	.3
14	Nonmetallic minerals, except fuels.....	910.3	382.3	5.2	265.5	58.2	41.4	12.0	46.4	145.7
141	Dimension stone.....	.4	.3	-	.3	(Z)	(Z)	-	-	.2
142	Crushed and broken stone.....	58.3	47.2	4.5	35.2	3.9	2.8	.9	26.1	17.9
1422	Crushed and broken limestone.....	49.2	40.0	4.5	32.3	.4	2.0	.9	25.1	12.9
1423	Crushed and broken granite.....	4.2	2.7	-	2.3	-	.4	-	.1	1.4
1429	Crushed and broken stone, n.e.c.	4.9	4.5	(Z)	.6	3.5	.5	(Z)	.9	3.6
144	Sand and gravel.....	177.5	118.4	.6	79.8	12.6	20.1	5.3	12.5	35.7
1442	Construction sand and gravel.....	134.9	99.7	.5	65.6	9.8	18.5	5.2	9.7	26.5
1443	Glass sand.....	32.3	13.9	-	10.2	2.8	.9	(Z)	2.6	8.7
1444	Molding sand.....	7.0	3.5	.1	3.0	-	.5	(Z)	-	.3
1445	Industrial sand, n.e.c.	3.4	1.3	-	1.0	(Z)	.3	(Z)	.2	.1
145	Clay and related minerals.....	13.3	9.9	(Z)	9.2	.4	.3	(Z)	2.4	7.5
1455	Kaolin and ball clay.....	6.5	5.5	-	5.2	-	.3	(Z)	2.4	4.8
1456	Feldspar.....	3.4	2.7	-	2.6	.2	(Z)	-	-	2.3
1459	Clay and related minerals, n.e.c.	1.8	.7	(Z)	.7	(Z)	(Z)	(Z)	-	.1
147	Chemical and fertilizer minerals.....	651.7	204.7	.1	139.8	41.2	17.9	5.7	5.3	83.4
1474	Potash, soda, and borate minerals.....	56.8	6.6	-	3.0	-	3.7	-	-	-
1475	Phosphate rock.....	554.6	169.0	(Z)	133.9	19.9	9.5	5.7	5.0	65.8
1476	Rock salt.....	10.2	6.0	(Z)	.6	5.4	-	-	(Z)	(Z)
1477	Sulfur.....	25.8	21.6	-	1.0	15.8	4.7	-	-	16.6
149	Miscellaneous nonmetallic minerals.....	9.0	1.8	.1	1.3	(Z)	.3	.1	(Z)	.9
1493	Mica.....	4.6	.5	-	.5	(Z)	(Z)	-	-	.5

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero. (Z) Less than 50 million gallons.

¹See table 1A, footnote 4.

²See table 1A, footnote 2.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Value of shipments (million dollars)	Water intake by kind and source							
			Total	By kind		Public water system	By source			Mine water used
				Fresh	Brackish		Company water system			
							Surface	Ground	Tidewater	
	United States, total.....	14,190.1	1,408.1	1,089.0	319.1	49.3	688.6	314.1	31.1	¹ 325.0
	New England Division.....	8.6	3.5	3.0	.4	.8	2.4	.1	.1	.1
14	Maine.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	New Hampshire.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Massachusetts.....	4.5	1.4	1.1	.3	-	1.2	.1	.1	-
14	Nonmetallic minerals, except fuels.....	4.5	1.4	1.1	.3	-	1.2	.1	.1	-
	Rhode Island.....	1.1	.2	.2	-	-	.1	-	-	.1
14	Nonmetallic minerals, except fuels.....	1.1	.2	.2	-	-	.1	-	-	.1
	Connecticut.....	2.4	1.7	1.6	.1	.8	.9	-	-	-
14	Nonmetallic minerals, except fuels.....	2.4	1.7	1.6	.1	.8	.9	-	-	-
	Middle Atlantic Division.....	468.4	60.3	51.4	9.0	2.5	27.4	7.2	3.9	19.3
	New York.....	67.3	14.3	14.0	.3	.1	8.5	.7	3.7	1.3
10	Metal mining.....	34.4	6.8	6.8	-	-	6.6	(Z)	-	.2
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	New Jersey.....	15.6	15.1	15.1	-	(Z)	8.7	3.2	.2	3.1
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pennsylvania.....	385.4	30.9	22.2	8.7	2.5	10.2	3.3	-	14.9
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	Anthracite mining.....	32.1	9.5	3.0	6.4	1.7	.4	(Z)	-	7.4
12	Bituminous coal and lignite mining.....	252.4	2.5	2.1	.4	.4	1.6	.1	-	.4
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	48.5	13.5	11.7	1.9	.3	7.3	.1	-	5.8
	East North Central Division.....	743.9	95.5	65.7	29.8	5.5	51.3	12.7	-	26.0
	Ohio.....	83.0	16.1	15.0	1.1	5.0	7.1	2.4	-	1.6
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	34.6	15.5	14.4	1.0	5.0	6.5	2.4	-	1.6
	Indiana.....	78.0	11.7	10.9	.8	(Z)	6.3	1.7	-	3.7
12	Bituminous coal and lignite mining.....	55.9	3.8	3.8	-	-	2.1	.3	-	1.4
13	Oil and gas extraction.....	10.1	1.4	.6	.8	(Z)	.1	.9	-	.5
14	Nonmetallic minerals, except fuels.....	12.0	6.5	6.5	-	-	4.1	.6	-	1.9
	Illinois.....	292.7	29.7	10.2	19.6	.2	7.0	7.4	-	15.1
12	Bituminous coal and lignite mining.....	157.6	5.0	4.9	.1	.1	1.0	.2	-	3.7
13	Oil and gas extraction.....	116.2	17.9	2.1	15.9	.1	.4	7.1	-	10.4
14	Nonmetallic minerals, except fuels.....	18.9	6.8	3.2	3.6	(Z)	5.6	.1	-	1.1
	Michigan.....	280.0	35.0	26.9	8.1	.4	29.6	.9	-	4.2
10	Metal mining.....	227.7	20.5	13.7	6.8	.3	19.5	.5	-	.1
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	34.2	12.9	11.7	1.2	-	10.1	.2	-	2.7
	Wisconsin.....	10.2	2.9	2.8	.2	-	1.4	.3	-	1.3
10	Metal mining.....	4.3	2.1	2.1	-	-	.9	(Z)	-	1.1
14	Nonmetallic minerals, except fuels.....	5.9	.9	.7	.2	-	.5	.2	-	.2
	West North Central Division.....	925.7	352.3	335.0	17.3	1.0	315.9	12.5	-	23.0
	Minnesota.....	445.0	314.2	313.9	.3	.9	304.4	.7	-	8.2
10	Metal mining.....	438.2	312.3	312.3	-	.3	303.9	.1	-	8.0
14	Nonmetallic minerals, except fuels.....	6.8	1.9	1.6	.3	.6	.4	.6	-	.3
	Iowa.....	10.4	10.7	6.7	4.0	-	8.1	.7	-	1.9
14	Nonmetallic minerals, except fuels.....	10.4	10.7	6.7	4.0	-	8.1	.7	-	1.9

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Gross water used, including recirculation or reuse	Water used and discharged by point of discharge						Mine water drained and discharged	Water treated prior to discharge
			Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users		
	United States, total.....	3,694.0	1,165.4	7.1	777.4	85.3	272.0	23.5	² 200.0	289.0
	New England Division.....	3.9	3.3	-	2.7	.1	.4	-	-	.9
14	Maine.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	New Hampshire.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Massachusetts.....	1.8	1.3	-	1.0	.1	.2	-	-	.1
	Nonmetallic minerals, except fuels.....	1.8	1.3	-	1.0	.1	.2	-	-	.1
14	Rhode Island.....	.2	.2	-	.1	-	.1	-	-	-
	Nonmetallic minerals, except fuels.....	.2	.2	-	.1	-	.1	-	-	-
14	Connecticut.....	1.8	1.6	-	1.5	-	.1	-	-	.8
	Nonmetallic minerals, except fuels.....	1.8	1.6	-	1.5	-	.1	-	-	.8
	Middle Atlantic Division.....	104.6	48.2	(Z)	34.7	7.4	6.0	.1	27.0	24.3
10	New York.....	20.8	9.8	-	5.1	3.9	.8	.1	1.1	6.3
13	Metal mining.....	11.8	2.5	-	2.5	-	(Z)	-	.3	1.8
14	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	New Jersey.....	26.6	10.7	-	6.9	3.5	.2	-	1.3	4.3
14	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Pennsylvania.....	57.2	27.8	(Z)	22.7	(Z)	5.0	.1	24.6	13.7
11	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Anthracite mining.....	11.6	9.2	-	5.2	-	4.0	-	.4	4.6
13	Bituminous coal and lignite mining.....	17.1	2.0	(Z)	1.6	-	.3	.1	10.6	1.2
14	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	19.5	12.3	(Z)	11.8	0	.5	-	3.7	6.1
	East North Central Division.....	226.7	80.9	4.8	51.7	-	19.5	4.9	19.7	30.0
12	Ohio.....	21.8	15.9	4.7	9.2	-	2.0	(Z)	5.5	3.8
13	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	20.9	15.4	4.7	8.8	-	1.9	-	4.9	3.3
12	Indiana.....	20.5	10.5	-	3.5	-	2.2	4.8	.1	4.1
13	Bituminous coal and lignite mining.....	9.4	3.2	-	1.1	-	.5	1.6	-	-
14	Oil and gas extraction.....	1.5	1.2	-	.1	-	1.0	.1	-	(Z)
	Nonmetallic minerals, except fuels.....	9.6	6.0	-	2.2	-	.7	3.1	.1	4.1
12	Illinois.....	50.8	22.4	(Z)	10.2	-	12.1	.1	.5	2.5
13	Bituminous coal and lignite mining.....	19.8	4.0	(Z)	2.9	-	1.1	(Z)	.2	.4
14	Oil and gas extraction.....	21.4	11.8	(Z)	2.1	-	9.6	.1	(Z)	1.0
	Nonmetallic minerals, except fuels.....	9.5	6.6	(Z)	5.1	-	1.4	(Z)	.3	1.1
10	Michigan.....	130.0	29.3	.1	26.5	-	2.7	-	11.5	17.6
12	Metal mining.....	114.7	15.6	.1	14.4	-	1.1	-	5.0	7.6
13	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonmetallic minerals, except fuels.....	13.4	12.4	-	12.1	-	.2	-	6.3	9.9
10	Wisconsin.....	3.6	2.9	-	2.4	-	.6	-	2.1	2.0
14	Metal mining.....	2.6	2.1	-	2.0	-	.1	-	1.9	2.0
	Nonmetallic minerals, except fuels.....	1.0	.9	-	.4	-	.5	-	.2	-
	West North Central Division.....	613.5	341.8	.5	324.0	(Z)	15.7	1.6	26.3	27.9
10	Minnesota.....	518.0	309.7	.4	306.1	-	3.2	-	10.7	18.1
14	Metal mining.....	515.5	307.8	.2	305.5	-	2.2	-	10.7	17.4
	Nonmetallic minerals, except fuels.....	2.5	1.9	.3	.6	-	1.0	-	-	.7
14	Iowa.....	15.3	10.5	-	9.5	-	1.0	-	2.0	3.6
	Nonmetallic minerals, except fuels.....	15.3	10.5	-	9.5	-	1.0	-	2.0	3.6

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Value of shipments (million dollars)	Water intake by kind and source							
			Total	By kind		By source				
				Fresh	Brackish	Public water system	Company water system			Mine water used
							Surface	Ground	Tidewater	
	West North Central Division--Continued									
	Missouri.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	North Dakota.....	57.9	2.7	.3	2.4	-	.3	1.7	-	.7
13	Oil and gas extraction.....	56.7	2.4	(Z)	2.4	-	-	1.7	-	.7
14	Nonmetallic minerals, except fuels.....	1.2	.3	.3	-	-	.3	(Z)	-	-
	South Dakota.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nebraska.....	14.8	1.4	.9	.5	-	.2	.8	-	.4
13	Oil and gas extraction.....	14.3	1.1	.6	.5	-	-	.8	-	.3
14	Nonmetallic minerals, except fuels.....	.4	.3	.3	-	-	.2	.1	-	(Z)
	Kansas.....	314.4	16.5	6.4	10.1	(Z)	.4	7.4	-	8.7
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	312.5	14.6	4.5	10.1	(Z)	.1	7.3	-	7.2
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	South Atlantic Division.....	824.4	313.2	310.6	2.6	.9	118.4	67.9	5.7	120.2
	Delaware.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Maryland.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	District of Columbia.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Virginia.....	84.3	6.3	5.9	.4	.1	5.9	.1	-	.3
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	10.7	2.0	1.6	.4	.1	1.9	.1	-	-
	West Virginia.....	464.5	10.7	10.1	.7	.1	7.9	.6	-	2.1
12	Bituminous coal and lignite mining.....	403.7	5.4	4.8	.6	.1	2.9	.5	-	1.9
13	Oil and gas extraction.....	50.3	4.0	3.9	.1	(Z)	3.9	.1	-	.1
14	Nonmetallic minerals, except fuels.....	10.6	1.3	1.3	-	-	1.1	.1	-	.2
	North Carolina.....	22.1	31.8	31.8	-	.6	11.0	.2	-	20.0
14	Nonmetallic minerals, except fuels.....	22.1	31.8	31.8	-	.6	11.0	.2	-	20.0
	South Carolina.....	16.0	4.7	4.7	-	(Z)	3.7	.5	-	.6
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Georgia.....	89.7	14.1	14.1	-	(Z)	6.3	6.8	-	1.0
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Florida.....	143.0	238.3	237.0	1.3	(Z)	82.3	59.8	-	96.2
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	129.9	235.7	234.5	1.2	(Z)	82.3	47.3	-	96.1
	East South Central Division.....	432.7	34.6	30.4	4.2	1.3	23.5	2.7	.1	6.9
	Kentucky.....	202.8	8.5	6.9	1.7	.7	2.6	1.5	-	3.7
12	Bituminous coal and lignite mining.....	146.9	3.4	3.4	(Z)	.6	2.0	.1	-	.6
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Tennessee.....	51.1	13.3	13.3	-	.1	11.7	.3	-	1.3
10	Metal mining.....	26.4	4.0	4.0	-	(Z)	2.8	(Z)	-	1.1
14	Nonmetallic minerals, except fuels.....	24.6	9.3	9.3	-	.1	8.9	.3	-	.2

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Gross water used, including recirculation or reuse	Water used and discharged by point of discharge					Mine water drained and discharged	Water treated prior to discharge
			Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users	
	West North Central Division--Continued								
	Missouri.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	North Dakota.....	2.8	2.7	-	.6	-	2.1	-	.2
13	Oil and gas extraction.....	2.4	2.4	-	.4	-	1.9	-	(Z)
14	Nonmetallic minerals, except fuels.....	.4	.3	-	.2	-	.1	-	.1
	South Dakota.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nebraska.....	2.5	1.2	(Z)	.2	-	.8	.1	.5
13	Oil and gas extraction.....	2.0	.9	(Z)	(Z)	-	.8	.1	.5
14	Nonmetallic minerals, except fuels.....	.5	.3	-	.2	-	.1	(Z)	-
	Kansas.....	58.2	12.3	-	2.4	(Z)	8.5	1.4	.3
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	55.8	10.4	-	.6	(Z)	8.4	1.4	.3
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	South Atlantic Division.....	683.7	225.3	.1	182.9	25.8	10.6	5.8	46.7
	Delaware.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Maryland.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	District of Columbia.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Virginia.....	22.6	6.1	.1	6.0	-	(Z)	-	4.0
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	3.7	2.0	.1	1.9	-	-	(Z)	.6
	West Virginia.....	37.5	8.7	(Z)	7.9	-	.7	(Z)	19.6
12	Bituminous coal and lignite mining.....	22.1	3.5	(Z)	3.0	-	.4	(Z)	19.3
13	Oil and gas extraction.....	10.5	3.9	-	3.8	-	(Z)	-	.1
14	Nonmetallic minerals, except fuels.....	4.9	1.3	-	1.1	-	.2	-	.4
	North Carolina.....	56.4	27.2	-	7.1	20.1	(Z)	-	12.2
14	Nonmetallic minerals, except fuels.....	56.4	27.2	-	7.1	20.1	(Z)	-	12.2
	South Carolina.....	7.4	4.6	-	4.3	-	.3	-	.7
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Georgia.....	36.8	12.7	-	12.3	-	.4	(Z)	2.6
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Florida.....	515.2	158.9	-	144.1	-	9.1	5.7	7.5
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	511.3	157.4	-	142.9	-	8.8	5.7	7.5
	East South Central Division.....	63.4	31.5	(Z)	23.6	-	4.9	3.1	7.9
	Kentucky.....	22.8	7.0	(Z)	3.0	-	.9	3.1	.3
12	Bituminous coal and lignite mining.....	11.2	2.9	(Z)	2.4	-	.2	.3	.2
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Tennessee.....	24.7	12.2	(Z)	11.1	-	1.2	(Z)	.6
10	Metal mining.....	4.5	3.8	-	3.2	-	.6	(Z)	.6
14	Nonmetallic minerals, except fuels.....	20.1	8.4	(Z)	7.9	-	.5	-	1.9

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Value of shipments (million dollars)	Water intake by kind and source							
			Total	By kind		Public water system	By source			Mine water used
				Fresh	Brackish		Company water system			
							Surface	Ground	Tidewater	
	East South Central Division--Continued									
	Alabama.....	101.6	4.0	3.4	.5	.6	2.7	.3	(Z)	.5
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	76.2	1.6	1.6	-	.1	1.5	(Z)	(Z)	(Z)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	7.2	.9	.6	.3	(Z)	.6	.3	-	(Z)
	Mississippi.....	77.2	8.8	6.8	2.0	-	6.6	.6	.1	1.6
13	Oil and gas extraction.....	73.2	2.3	.3	2.0	-	.1	.5	.1	1.6
14	Nonmetallic minerals, except fuels.....	4.0	6.5	6.5	-	-	6.5	(Z)	(Z)	-
	West South Central Division.....	7,931.7	301.9	139.7	162.2	24.1	86.6	90.0	18.9	82.3
	Arkansas.....	53.5	4.8	2.9	1.9	(Z)	1.1	1.0	-	2.7
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	39.5	2.5	.6	1.9	(Z)	-	.7	-	1.7
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Louisiana.....	3,457.8	127.6	72.5	55.1	13.2	71.3	13.3	18.8	11.0
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Oklahoma.....	697.5	41.2	7.2	34.0	.8	2.9	16.6	-	20.9
13	Oil and gas extraction.....	695.1	40.4	6.9	33.5	.8	2.1	16.5	-	20.9
14	Nonmetallic minerals, except fuels.....	2.4	.8	.2	.6	(Z)	.8	(Z)	-	(Z)
	Texas.....	3,722.9	128.3	57.1	71.2	10.0	11.3	59.1	.1	47.7
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	3,573.3	104.1	37.3	66.9	9.2	1.4	48.8	.1	44.5
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Mountain Division.....	1,718.8	171.4	117.5	53.9	5.7	54.4	87.7	-	23.6
	Montana.....	84.1	7.2	5.9	1.3	.5	4.2	.8	-	1.8
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	29.5	1.7	.4	1.3	-	-	.8	-	.9
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Idaho.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Wyoming.....	235.1	19.6	11.7	8.0	-	7.9	5.0	-	6.8
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	161.5	16.1	8.5	7.6	-	6.0	3.7	-	6.3
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Colorado.....	153.6	12.6	10.3	2.3	.5	9.5	.4	-	2.3
10	Metal mining.....	58.4	7.8	7.3	.5	.2	6.8	.2	-	.6
12	Bituminous coal and lignite mining.....	20.9	.1	.1	(Z)	(Z)	-	(Z)	-	.1
13	Oil and gas extraction.....	73.4	4.2	2.5	1.8	.2	2.2	.2	-	1.6
14	Nonmetallic minerals, except fuels.....	.9	.5	.5	-	(Z)	.5	-	-	-
	New Mexico.....	628.3	20.6	11.5	9.1	.7	.8	14.2	-	4.9
10	Metal mining.....	111.4	5.9	4.7	1.2	(Z)	.3	3.8	-	1.8
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	449.6	10.3	4.7	5.7	.7	.5	6.1	-	3.1
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Arizona.....	319.0	30.7	29.3	1.4	3.2	.6	22.0	-	4.9
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Utah.....	208.5	37.5	5.7	31.8	.5	23.0	12.3	-	1.7
10	Metal mining.....	104.1	33.0	3.5	29.5	-	22.6	9.3	-	1.1
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	63.8	3.4	1.7	1.7	-	.4	2.5	-	.5
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Gross water used, including recirculation or reuse	Water used and discharged by point of discharge					Mine water drained and discharged	Water treated prior to discharge
			Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users	
	East South Central Division--Continued								
	Alabama.....	6.8	3.4	-	2.6	-	.8	-	6.6
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	3.8	1.6	-	1.2	-	.4	-	3.2
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	1.2	.9	-	.9	-	(Z)	-	1.9
	Mississippi.....	9.2	8.8	-	6.8	-	2.0	-	.4
13	Oil and gas extraction.....	2.3	2.3	-	.3	-	1.9	-	.4
14	Nonmetallic minerals, except fuels.....	7.0	6.5	-	6.5	-	(Z)	-	(Z)
	West South Central Division.....	1,179.2	265.4	.1	93.6	41.7	126.6	3.5	36.2
	Arkansas.....	10.2	4.4	(Z)	1.9	(Z)	2.5	(Z)	.9
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	6.7	2.2	(Z)	.2	(Z)	2.0	(Z)	.9
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Louisiana.....	268.9	119.5	(Z)	82.4	29.6	7.5	-	20.9
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Oklahoma.....	121.3	35.1	(Z)	1.2	.3	33.5	.1	1.0
13	Oil and gas extraction.....	119.4	34.3	(Z)	1.0	.3	32.9	.1	1.0
14	Nonmetallic minerals, except fuels.....	1.9	.8	-	.2	-	.6	(Z)	-
	Texas.....	778.9	106.4	(Z)	8.2	11.8	83.0	3.4	13.3
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	748.3	84.6	(Z)	4.0	3.7	73.6	3.3	13.0
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Mountain Division.....	645.2	118.8	.4	48.6	.2	66.7	3.0	28.0
	Montana.....	17.6	6.4	-	4.1	-	1.7	.6	1.9
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	1.8	1.7	-	.3	-	1.4	(Z)	.4
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Idaho.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Wyoming.....	40.1	18.2	(Z)	9.1	-	7.0	2.1	6.7
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	18.9	15.3	(Z)	6.7	-	6.7	1.9	5.3
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Colorado.....	34.0	10.8	.1	4.5	(Z)	6.2	(Z)	1.3
10	Metal mining.....	17.3	6.3	(Z)	4.0	-	2.2	-	.6
12	Bituminous coal and lignite mining.....	.1	(Z)	-	(Z)	-	(Z)	-	.5
13	Oil and gas extraction.....	15.8	4.0	(Z)	.2	(Z)	3.8	(Z)	.1
14	Nonmetallic minerals, except fuels.....	.7	.5	(Z)	.3	-	.2	-	-
	New Mexico.....	140.7	15.2	.1	4.1	.2	10.7	.1	1.1
10	Metal mining.....	33.3	3.5	.1	2.7	-	.8	(Z)	.7
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	94.2	8.6	(Z)	.8	.2	7.6	.1	.5
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	-	(D)	-	(D)
	Arizona.....	164.6	16.1	.1	6.6	-	9.4	(Z)	.7
10	Metal mining.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)
	Utah.....	199.0	14.4	.1	11.7	-	2.3	.2	14.7
10	Metal mining.....	192.4	10.7	(Z)	10.6	-	.1	(Z)	14.2
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)
13	Oil and gas extraction.....	3.9	3.3	(Z)	1.1	-	2.2	(Z)	.2
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Value of shipments (million dollars)	Water intake by kind and source							
			Total	By kind		Public water system	By source			Mine water used
				Fresh	Brackish		Company water system			
							Surface	Ground	Tidewater	
	Mountain Division--Continued									
	Nevada.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pacific Division.....	1,135.9	75.3	35.6	39.8	7.5	8.6	33.3	2.3	23.6
	Washington.....	9.6	4.1	3.7	.4	.1	1.6	2.0	.4	-
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	6.6	3.6	3.3	.4	.1	1.2	2.0	.4	-
	Oregon.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	California.....	1,113.2	67.8	28.5	39.3	7.4	3.6	31.3	1.9	23.6
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	890.8	49.1	13.3	35.8	6.8	.1	17.5	1.6	22.9
14	Nonmetallic minerals, except fuels.....	151.1	15.5	12.0	3.5	.5	3.2	11.5	.2	(Z)
	Alaska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Detailed figures may not add to totals because of independent rounding. - Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 50 million gallons.

TABLE 3. Water Intake by Source, Gross Water Used, Water Discharged by Discharge Point and Water Treated: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

(Water data in billion gallons)

Code	State and major industry group	Gross water used, including recirculation or reuse	Water used and discharged by point of discharge						Mine water drained and discharged	Water treated prior to discharge
			Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users		
	Mountain Division--Continued									
	Nevada.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
10	Metal mining.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
	Pacific Division.....	173.8	50.2	1.2	15.7	10.2	21.6	1.4	8.1	26.6
	Washington.....	4.2	3.8	-	.6	3.1	.2	-	.9	.4
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
14	Nonmetallic minerals, except fuels.....	3.7	3.4	-	.3	3.1	.1	-	.6	.1
	Oregon.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
14	Nonmetallic minerals, except fuels.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
	California.....	165.9	42.8	1.2	12.2	7.0	20.9	1.4	6.8	23.5
10	Metal mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
13	Oil and gas extraction.....	103.1	26.9	1.1	6.0	6.7	11.8	1.3	3.5	19.8
14	Nonmetallic minerals, except fuels.....	56.9	13.2	(Z)	4.4	.3	8.4	.2	-	2.8
	Alaska.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
10	Metal mining.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
13	Oil and gas extraction.....	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)

¹Includes 130 billion gallons of water produced with oil or gas and subsequently used in crude oil or natural gas production.²See table 2B, footnote 1.

TABLE 4. Water Intake by Source and Purpose, 1968, and Gross Water Used and Water Discharged by Establishments Recirculating Water and Industry Groups: 1968

(Water data in billion gallons)										
Code	Industry group	All employees (number)	Water intake by kind and source							
			Total	By kind		Public water system	By source			Mine water
				Fresh	Brackish		Surface	Ground	Tidewater	
	All mineral operations.....	116.4	1,032.3	873.9	158.4	30.6	556.6	216.3	2.6	226.2
10	Metal mining.....	39.2	483.6	444.3	39.3	5.0	379.1	75.0	-	24.5
101	Iron ores.....	16.1	337.7	337.4	.3	.5	324.8	2.6	-	9.7
102	Copper ores.....	12.7	107.6	69.5	38.1	3.8	34.6	62.2	-	7.0
103	Lead and zinc ores.....	4.6	12.9	12.9	-	.4	4.0	4.5	-	4.0
104	Gold and silver ores.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
109	Miscellaneous metal ores.....	3.3	18.8	18.4	.4	.2	11.9	4.5	-	2.2
11	Anthracite mining.....	.7	5.7	2.2	3.5	.2	.2	(Z)	-	5.4
12	Bituminous coal and lignite mining.....	33.3	19.5	17.8	1.7	1.2	9.8	1.0	-	7.4
13	Oil and gas extraction.....	22.0	158.1	73.1	85.0	21.9	22.3	68.0	1.8	144.1
131	Crude petroleum and natural gas.....	14.3	96.1	24.8	71.3	6.9	1.4	42.3	1.6	43.8
132	Natural gas liquids.....	7.4	61.8	48.0	13.7	14.9	20.9	25.5	.1	.3
138	Oil and gas field services.....	.2	.2	.2	-	-	-	.2	-	-
14	Nonmetallic minerals, except fuels.....	21.1	365.5	336.6	28.9	2.3	145.2	72.3	.8	144.8
141	Dimension stone.....	(Z)	.2	.2	-	-	.2	-	-	-
142	Crushed and broken stone.....	3.3	13.7	11.3	2.4	.7	3.3	1.0	-	8.6
144	Sand and gravel.....	4.4	71.1	52.0	19.1	.5	42.9	7.3	.1	20.2
145	Clay and related minerals.....	2.2	6.8	6.4	.4	.1	1.7	4.9	(Z)	(Z)
147	Chemical and fertilizer minerals.....	10.1	272.5	265.6	6.9	.8	96.5	58.7	.7	115.9
149	Miscellaneous nonmetallic minerals.....	1.1	1.3	1.2	.1	.1	.6	.5	-	(Z)
Code	Industry group	Water intake by purpose								Gross water used including recirculation or reuse
		All purposes		Process	Air conditioning	Steam, electric power generation	Other cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding	
		Total	Treated prior to use							
	All mineral operations.....	1,032.3	177.6	725.6	.9	110.7	80.4	26.3	88.5	3,318.3
10	Metal mining.....	483.6	24.1	353.3	.7	108.1	9.5	12.0	-	1,186.0
101	Iron ores.....	337.7	11.0	228.9	.2	104.9	1.7	1.9	-	656.4
102	Copper ores.....	107.6	10.5	97.6	.3	2.5	1.3	5.9	-	445.2
103	Lead and zinc ores.....	12.9	.2	7.3	-	-	3.1	2.6	-	16.4
104	Gold and silver ores.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
109	Miscellaneous metal ores.....	18.8	2.2	13.9	(Z)	.8	2.8	1.2	-	48.7
11	Anthracite mining.....	5.7	1.4	5.7	-	-	-	(Z)	-	8.2
12	Bituminous coal and lignite mining.....	19.5	4.0	18.8	-	-	.1	.7	-	96.5
13	Oil and gas extraction.....	158.1	71.4	6.9	(Z)	1.0	53.9	7.7	88.5	1,234.8
131	Crude petroleum and natural gas.....	96.1	50.8	5.8	(Z)	.3	1.5	1.8	86.6	145.0
132	Natural gas liquids.....	61.8	20.7	1.0	(Z)	.7	52.4	5.9	1.8	1,089.6
138	Oil and gas field services.....	.2	-	(Z)	-	-	(Z)	.1	.1	.3
14	Nonmetallic minerals, except fuels.....	365.5	76.7	341.1	.1	1.5	16.9	5.9	-	792.7
141	Dimension stone.....	.2	-	.2	-	-	-	-	-	.3
142	Crushed and broken stone.....	13.7	.1	13.1	-	.3	(Z)	.2	-	21.9
144	Sand and gravel.....	71.1	8.8	70.7	-	.1	.1	.2	-	121.3
145	Clay and related minerals.....	6.8	1.0	4.9	(Z)	1.1	.8	.1	-	9.3
147	Chemical and fertilizer minerals.....	272.5	66.8	251.2	.1	(Z)	15.9	5.2	-	635.7
149	Miscellaneous nonmetallic minerals.....	1.3	.1	1.0	-	-	.1	.2	-	4.2

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 50 million gallons.

¹See table 1A, footnote 4.

TABLE 5. Water Intake, Number of Establishments Recirculating Water, Gross Water Recirculated and Water Discharged by Point of Discharge for Establishments Recirculating Water: 1968

(Water data in billion gallons)										
Code	Industry group	Value added in mining (million dollars)	Total water intake	Estab-lishments recirculating water (number)	Gross water used including recirculation or reuse					
					Total	Purpose of recirculation				Boiler feed, sanitary service, and other uses
						Process	Air conditioning	Steam, electric power generation	Other cooling and condensing	
	All mineral operations.....	4,567.9	1,032.3	943	3,318.3	1,670.4	2.2	294.3	1,163.6	187.8
10	Metal mining.....	1,022.6	483.6	104	1,186.0	837.2	1.1	262.2	46.6	39.0
101	Iron ores.....	512.0	337.7	37	656.4	542.7	.4	104.9	6.5	2.0
102	Copper ores.....	329.2	107.6	26	445.2	226.3	.5	156.5	29.4	32.5
103	Lead and zinc ores.....	58.2	12.9	17	16.4	9.8	-	(Z)	3.9	2.7
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
109	Miscellaneous metal ores.....	92.5	18.8	18	48.7	40.3	(Z)	.8	6.2	1.3
11	Anthracite mining.....	11.3	5.7	13	8.2	8.2	-	-	-	(Z)
12	Bituminous coal and lignite mining.....	630.2	19.5	132	96.5	96.4	-	-	(Z)	.2
13	Oil and gas extraction.....	2,373.3	158.1	403	1,234.8	16.7	.9	32.1	1,045.2	139.9
131	Crude petroleum and natural gas.....	1,762.8	96.1	151	145.0	15.6	.8	.7	15.3	112.4
132	Natural gas liquids.....	606.6	61.8	249	1,089.6	1.1	.1	31.3	1,029.8	27.3
138	Oil and gas field services.....	3.9	.2	3	.3	(Z)	-	-	.1	.2
14	Nonmetallic minerals, except fuels.....	530.6	365.5	291	792.7	712.0	.2	.1	71.7	8.7
141	Dimension stone.....	.9	.2	3	.3	.3	-	-	-	-
142	Crushed and broken stone.....	57.2	13.7	50	21.9	20.8	-	(Z)	(Z)	1.0
144	Sand and gravel.....	81.0	71.1	178	121.3	120.2	-	(Z)	.2	1.0
145	Clay and related minerals.....	39.4	6.8	12	9.3	7.9	-	(Z)	1.3	.1
147	Chemical and fertilizer minerals.....	327.1	272.5	42	635.7	558.9	.2	.1	70.0	6.6
149	Miscellaneous nonmetallic minerals.....	25.2	1.3	6	4.2	3.9	-	-	.3	(Z)
Code	Industry group	Water used and discharged by point of discharge							Water treated prior to discharge	
		Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users	Mine water drained and discharged		
	All mineral operations.....	825.3	2.0	624.6	39.9	140.6	18.2	91.3	191.1	
10	Metal mining.....	418.7	.5	372.7	(Z)	44.6	.9	44.7	57.1	
101	Iron ores.....	324.6	.3	321.2	-	3.1	-	12.3	26.6	
102	Copper ores.....	63.4	.1	24.1	-	38.5	.7	3.2	10.3	
103	Lead and zinc ores.....	9.7	(Z)	9.1	-	.5	.1	24.3	5.1	
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
109	Miscellaneous metal ores.....	15.3	(Z)	13.5	(Z)	1.6	.2	1.5	11.2	
11	Anthracite mining.....	5.5	-	1.0	-	4.5	-	(Z)	.3	
12	Bituminous coal and lignite mining.....	14.4	.1	9.7	-	2.6	2.0	27.4	3.9	
13	Oil and gas extraction.....	113.4	1.0	41.2	5.3	62.4	3.5	14.0	23.8	
131	Crude petroleum and natural gas.....	71.9	1.0	7.4	4.0	57.5	1.9	4.0	20.9	
132	Natural gas liquids.....	41.3	(Z)	33.6	1.2	4.8	1.6	(Z)	2.9	
138	Oil and gas field services.....	.2	-	.1	(Z)	(Z)	-	-	-	
14	Nonmetallic minerals, except fuels.....	273.3	.4	200.0	34.6	26.6	11.8	15.2	105.9	
141	Dimension stone.....	.2	-	.2	(D)	(D)	-	-	.1	
142	Crushed and broken stone.....	11.9	.1	8.8	.1	2.2	.6	5.8	4.8	
144	Sand and gravel.....	63.7	.2	45.0	3.5	9.8	5.3	4.1	20.5	
145	Clay and related minerals.....	6.3	(Z)	5.9	.3	.1	(Z)	-	5.1	
147	Chemical and fertilizer minerals.....	190.0	.1	139.4	30.6	14.2	5.7	5.3	75.1	
149	Miscellaneous nonmetallic minerals.....	1.1	(Z)	.7	(Z)	.2	.1	(Z)	.3	

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 50 million gallons.
¹See table 1A, footnote 2.

TABLE 6. Water Intake, Water Treated Prior to Use and Number of Establishments Treating Water Prior to Use by Type of Treatment: 1968

A. INDUSTRY GROUPS AND INDUSTRIES

Code	Industry group and industry	Water intake (billion gallons)										
		Total	Treated prior to use									
			Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Other
	All mineral operations.....	1,408.1	283.7	16.5	29.3	68.7	37.7	11.9	108.7	43.1	103.9	50.9
10	Metal mining.....	499.1	25.1	-	1.4	3.0	4.5	.3	4.4	5.1	10.2	.5
1011	Iron ores.....	340.1	11.1	-	.2	1.9	.2	-	1.4	.4	7.4	-
1021	Copper ores.....	109.3	10.5	-	.4	.1	3.2	.2	2.3	3.7	1.9	-
103	Lead and zinc ores.....	17.4	.2	-	-	.1	-	-	-	.1	.1	-
109	Miscellaneous metal ores.....	21.2	3.0	-	.7	.8	.9	.2	.5	.7	.7	.5
1094	Uranium-radium-vanadium ores.....	7.3	2.4	-	.7	.4	.8	.2	.5	.7	.7	.5
11	Anthracite mining.....	10.4	1.8	-	-	-	-	-	-	.1	.4	.8
12	Bituminous coal and lignite mining.....	25.0	4.7	.1	.2	.5	.1	-	.6	1.5	2.7	.6
13	Oil and gas extraction.....	390.4	159.5	15.1	19.2	58.3	13.7	6.7	101.3	26.1	33.5	31.9
131	Crude petroleum and natural gas.....	269.0	138.0	13.3	16.5	53.7	7.4	3.2	89.0	16.2	31.2	28.6
1312	Crude petroleum.....	255.2	136.0	13.3	16.5	53.1	7.2	3.2	87.8	15.9	30.4	28.4
1313	Natural gas.....	13.8	2.0	-	-	.6	.2	-	1.3	.3	.8	.2
1321	Natural gas liquids.....	119.9	20.8	1.7	2.7	4.6	6.3	3.5	11.6	9.9	2.3	3.3
138	Oil and gas field services.....	1.5	.7	-	-	-	-	-	.7	-	-	-
14	Nonmetallic minerals, except fuels.....	483.1	92.7	1.3	8.4	6.8	19.3	4.8	2.5	10.4	57.2	17.1
141	Dimension stone.....	.3	-	-	-	-	-	-	-	-	-	-
142	Crushed and broken stone.....	50.1	.1	-	-	.1	-	-	-	-	-	-
1422	Crushed and broken limestone.....	42.6	.1	-	-	.1	-	-	-	-	-	-
144	Sand and gravel.....	127.3	15.2	-	-	.1	-	-	-	.1	9.1	5.9
1442	Construction sand and gravel.....	105.1	8.3	-	-	.1	-	-	-	-	8.3	-
1443	Glass sand.....	17.2	6.1	-	-	-	-	-	-	.1	-	5.9
145	Clay and related minerals.....	10.8	1.1	-	-	-	-	-	1.1	.2	-	-
147	Chemical and fertilizer minerals.....	288.5	76.2	1.3	8.4	6.6	19.2	4.7	1.4	10.1	48.0	11.2
1474	Potash, soda, and borate minerals.....	8.6	1.5	-	-	-	.8	.8	.3	-	.3	-
1475	Phosphate rock.....	247.3	53.2	-	.1	.1	-	.2	-	-	42.3	10.6
1476	Rock salt.....	6.1	.5	-	-	-	.5	-	.4	-	-	-
1477	Sulfur.....	24.3	20.6	1.3	8.3	6.5	17.8	3.4	.6	10.0	5.4	.6
149	Miscellaneous nonmetallic minerals.....	6.1	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 6. Water Intake, Water Treated Prior to Use and Number of Establishments Treating Water Prior to Use by Type of Treatment: 1968—Continued

A. INDUSTRY GROUPS AND INDUSTRIES

Code	Industry group and industry	Number of establishments treating intake water prior to use										No treatment performed
		Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Other	
	All mineral operations.....	762	58	77	279	250	119	426	216	167	138	1,039
10	Metal mining.....	56	1	8	15	24	12	15	17	16	4	85
1011	Iron ores.....	20	-	4	7	5	1	4	5	11	1	27
1021	Copper ores.....	14	1	1	1	10	3	4	5	3	-	15
103	Lead and zinc ores.....	4	-	-	1	1	-	2	2	1	1	22
109	Miscellaneous metal ores.....	15	-	2	5	6	8	4	4	1	2	10
1094	Uranium-radium-vanadium ores.....	10	-	2	4	3	8	4	2	1	1	4
11	Anthracite mining.....	5	-	-	-	1	-	-	2	3	2	19
12	Bituminous coal and lignite mining.....	48	2	8	14	8	3	6	20	18	4	147
13	Oil and gas extraction.....	578	52	52	232	186	88	395	165	101	123	291
131	Crude petroleum and natural gas.....	363	36	34	172	41	15	259	42	84	83	219
1312	Crude petroleum.....	349	36	34	167	40	15	252	40	78	80	196
1313	Natural gas.....	14	-	-	5	1	-	7	2	6	3	23
1321	Natural gas liquids.....	212	16	18	60	145	73	133	123	17	40	58
138	Oil and gas field services.....	3	-	-	-	-	-	3	-	-	-	14
14	Nonmetallic minerals, except fuel.....	75	3	9	18	31	16	10	12	29	5	497
141	Dimension stone.....	-	-	-	-	-	-	-	-	-	-	4
142	Crushed and broken stone.....	6	-	-	4	2	-	-	1	1	-	121
1422	Crushed and broken limestone.....	3	-	-	2	2	-	-	1	-	-	78
144	Sand and gravel.....	28	1	1	5	-	2	1	2	21	2	322
1442	Construction sand and gravel.....	23	1	1	4	-	-	-	-	20	-	292
1443	Glass sand.....	4	-	-	1	-	2	1	2	-	2	12
145	Clay and related minerals.....	3	-	1	-	1	-	3	1	-	-	21
147	Chemical and fertilizer minerals.....	35	2	7	8	25	12	5	8	7	3	20
1474	Potash, soda and borate minerals.....	9	1	-	-	7	4	3	1	1	-	-
1475	Phosphate rock.....	5	-	1	2	1	2	-	-	2	2	13
1476	Rock salt.....	3	-	-	-	2	-	1	1	-	-	1
1477	Sulfur.....	14	1	6	6	13	5	1	6	3	1	1
149	Miscellaneous nonmetallic minerals.....	3	-	-	1	3	2	1	-	-	-	9

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero.

TABLE 6. Water Intake, Water Treated Prior to Use and Number of Establishments Treating Water Prior to Use by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Water intake (billion gallons)										
		Total	Treated prior to use									
			Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Other
	United States, total.....	1,408.1	283.7	16.5	29.3	68.7	37.7	11.9	108.7	43.1	103.9	50.9
	New England Division.....	3.5	-	-	-	-	-	-	-	-	-	-
	Middle Atlantic Division.....	60.3	8.1	(D)	(D)	3.1	.2	(D)	2.1	3.1	3.3	3.5
	Pennsylvania.....	30.9	7.6	(D)	(D)	2.8	(Z)	(D)	1.9	2.9	3.1	3.5
11	Anthracite mining.....	9.5	1.8	-	-	-	(Z)	-	-	(D)	(D)	(D)
12	Bituminous coal and lignite mining.....	2.5	.8	(D)	(D)	(D)	(D)	(D)	(D)	.4	.3	(D)
	East North Central Division.....	95.5	27.0	9.3	8.8	14.8	1.0	(D)	13.9	6.8	12.9	6.3
	Ohio.....	16.1	1.3	-	(D)	(D)	(D)	-	.7	(D)	.5	-
	Indiana.....	11.7	1.0	(D)	(D)	.4	(D)	-	.7	(D)	(D)	(D)
	Illinois.....	29.7	20.3	9.3	8.7	14.1	.3	(D)	12.2	6.4	12.0	2.4
12	Bituminous coal and lignite mining.....	5.0	2.6	-	(D)	(D)	(D)	-	-	.7	2.2	-
13	Oil and gas extraction.....	17.9	16.5	9.3	8.7	14.1	(D)	-	12.2	5.7	9.0	2.4
14	Nonmetallic minerals, except fuels.....	6.8	1.2	-	-	-	(D)	(D)	-	-	(D)	-
	West North Central Division.....	352.3	18.6	.9	.6	5.4	.3	.1	6.5	.7	7.8	2.0
	Minnesota.....	314.2	7.2	-	(D)	.5	.2	(D)	(D)	(D)	6.4	(D)
10	Metal mining.....	312.3	7.2	-	(D)	.5	.2	(D)	(D)	(D)	6.4	(D)
14	Nonmetallic minerals, except fuels.....	1.9	-	-	-	-	-	-	-	-	-	-
	Kansas.....	16.5	7.2	.9	.5	2.8	.1	.1	4.8	.4	.5	1.9
13	Oil and gas extraction.....	14.6	7.2	.9	.5	2.8	.1	.1	4.8	.4	.5	1.9
	South Atlantic Division.....	313.2	58.2	(D)	.3	.7	.3	(D)	1.1	.4	45.4	10.6
	East South Central Division.....	34.6	4.5	(D)	.1	1.8	.4	(D)	1.8	.8	2.3	.4
	West South Central Division.....	301.9	103.6	4.2	14.4	29.2	25.2	7.0	48.7	23.8	21.4	13.0
	Arkansas.....	4.8	2.9	(D)	(D)	(D)	(D)	-	(D)	(D)	1.4	-
13	Oil and gas extraction.....	2.5	1.5	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-
	Louisiana.....	127.6	14.8	(D)	5.7	6.8	6.0	1.7	3.0	1.4	5.8	1.9
	Oklahoma.....	41.2	22.0	1.6	.5	3.5	.6	(D)	18.8	3.2	1.9	2.8
13	Oil and gas extraction.....	40.4	22.0	1.6	.5	3.5	.6	(D)	18.8	3.2	1.9	2.8
14	Nonmetallic minerals, except fuels.....	.8	-	-	-	-	-	-	-	-	-	-
	Texas.....	128.3	63.9	2.0	7.9	18.2	18.4	5.3	25.7	18.9	12.4	8.4
13	Oil and gas extraction.....	104.1	46.2	.6	4.7	13.7	6.4	2.2	25.1	8.9	8.0	7.8
	Mountain Division.....	171.4	36.4	1.6	4.8	9.0	7.3	1.0	18.9	5.2	8.6	7.9
	Montana.....	7.2	3.7	-	-	(D)	(D)	-	.8	(D)	(D)	(D)
13	Oil and gas extraction.....	1.7	1.1	-	-	(D)	(D)	-	.8	-	(D)	(D)
	Wyoming.....	19.6	8.6	-	-	.5	2.3	(D)	6.2	(D)	2.4	(D)
13	Oil and gas extraction.....	16.1	7.0	-	-	.5	(D)	-	4.9	(D)	(D)	(D)
	Colorado.....	12.6	5.3	(D)	3.6	4.1	(D)	(D)	3.6	(D)	(D)	(D)
10	Metal mining.....	7.8	1.2	-	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
13	Oil and gas extraction.....	4.2	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	New Mexico.....	20.6	7.9	.4	(D)	2.4	1.0	.5	6.0	.8	.5	1.5
10	Metal mining.....	5.9	.8	-	-	(D)	(D)	(D)	(D)	-	-	-
13	Oil and gas extraction.....	10.3	6.8	-	-	2.4	.6	.5	5.3	.7	.5	1.5
	Arizona.....	30.7	5.5	-	(D)	-	.1	(D)	(D)	(D)	(D)	-
	Utah.....	37.5	3.3	-	(D)	1.7	.7	(D)	(D)	(D)	(D)	.9
10	Metal mining.....	33.0	1.0	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
13	Oil and gas extraction.....	3.4	2.2	-	-	(D)	-	(D)	(D)	-	(D)	(D)
	Pacific Division.....	75.3	27.3	(D)	.3	4.5	3.1	3.8	15.8	2.4	2.3	7.2
	California.....	67.8	27.1	(D)	.3	4.5	3.1	3.8	15.8	2.3	2.3	7.2
13	Oil and gas extraction.....	49.1	26.1	(D)	.3	4.5	2.7	3.2	15.5	2.3	2.3	7.2
14	Nonmetallic minerals, except fuels.....	15.5	.9	-	-	-	(D)	(D)	(D)	-	-	-

See footnotes at end of table.

TABLE 6. Water Intake, Water Treated Prior to Use and Number of Establishments Treating Water Prior to Use by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Number of establishments treating intake water prior to use										No treatment performed
		Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Other	
	United States, total.....	762	58	77	279	250	119	426	216	167	138	1,039
	New England Division.....	-	-	-	-	-	-	-	-	-	-	27
	Middle Atlantic Division.....	28	2	3	12	8	3	9	14	10	6	119
	Pennsylvania.....	20	1	2	6	4	2	6	12	8	5	66
11	Anthracite mining.....	5	-	-	-	1	-	-	2	3	2	17
12	Bituminous coal and lignite mining.....	9	1	1	2	1	1	2	7	4	1	24
	East North Central Division.....	73	15	14	35	12	2	32	16	32	7	163
	Ohio.....	7	-	1	1	1	-	4	1	4	-	65
	Indiana.....	11	3	2	9	1	-	8	1	2	2	32
	Illinois.....	46	11	11	22	7	1	18	11	23	4	29
12	Bituminous coal and lignite mining.....	15	-	2	1	2	-	-	6	11	-	12
13	Oil and gas extraction.....	27	11	9	21	3	-	18	5	11	4	2
14	Nonmetallic minerals, except fuels.....	4	-	-	-	2	1	-	-	1	-	15
	West North Central Division.....	65	7	7	28	11	6	34	11	20	7	97
	Minnesota.....	14	-	3	5	4	1	1	3	9	1	23
10	Metal mining.....	14	-	3	5	4	1	1	3	9	1	8
14	Nonmetallic minerals, except fuels.....	-	-	-	-	-	-	-	-	-	-	15
	Kansas.....	35	6	4	15	5	4	26	7	6	5	22
13	Oil and gas extraction.....	34	6	4	14	5	4	26	7	6	5	165
	South Atlantic Division.....	28	1	5	9	5	3	5	7	11	5	165
	East South Central Division.....	29	2	4	17	7	3	12	8	8	4	66
	West South Central Division.....	359	25	30	115	127	59	229	116	63	67	242
	Arkansas.....	10	2	1	2	2	-	3	2	7	-	12
13	Oil and gas extraction.....	5	2	1	2	2	-	3	2	2	-	8
	Louisiana.....	51	2	8	18	17	11	26	19	14	11	47
	Oklahoma.....	61	10	8	21	16	2	43	16	12	10	34
13	Oil and gas extraction.....	61	10	8	21	16	2	43	16	12	10	31
14	Nonmetallic minerals, except fuels.....	-	-	-	-	-	-	-	-	-	-	3
	Texas.....	237	11	13	74	92	46	157	79	30	46	149
13	Oil and gas extraction.....	225	10	10	71	84	42	156	73	26	45	122
	Mountain Division.....	120	5	9	46	42	26	69	24	17	28	73
	Montana.....	9	-	-	2	2	-	4	1	1	1	7
13	Oil and gas extraction.....	7	-	-	2	1	-	4	-	1	1	3
	Wyoming.....	20	-	-	7	5	3	11	2	4	3	10
13	Oil and gas extraction.....	15	-	-	7	3	-	10	1	3	3	6
	Colorado.....	11	1	4	8	3	3	6	2	3	3	12
10	Metal mining.....	4	-	2	3	2	2	3	1	-	1	2
13	Oil and gas extraction.....	7	1	2	5	1	1	3	1	3	2	3
	New Mexico.....	57	4	3	23	21	16	43	13	5	16	11
10	Metal mining.....	4	-	-	1	2	2	2	-	-	-	3
13	Oil and gas extraction.....	48	3	3	22	15	13	40	12	5	16	6
	Arizona.....	7	-	1	-	5	2	2	2	2	-	10
	Utah.....	12	-	1	6	4	2	3	3	2	4	9
10	Metal mining.....	3	-	1	2	2	1	2	3	1	-	3
13	Oil and gas extraction.....	5	-	-	3	-	1	1	-	1	3	4
	Pacific Division.....	60	1	5	17	38	17	36	20	6	14	87
	California.....	58	1	5	17	38	17	36	19	5	14	72
13	Oil and gas extraction.....	52	1	5	17	34	14	34	19	5	13	16
14	Nonmetallic minerals, except fuels.....	4	-	-	-	3	3	2	-	-	-	52

Note: Detailed figures may not add to totals because of independent rounding.

- Represents zero. - (Z) Less than 50 million gallons.

TABLE 7. Gross Water Used and Number of Establishments Treating Water Prior to Recirculation or Reuse by Type of Treatment: 1968

A. INDUSTRY GROUPS AND INDUSTRIES

Code	State and major industry group	Gross water used, including recirculation or reuse (billion gallons)	Number of establishments treating water prior to recirculation or reuse											No treatment performed
			Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Flotation	Other	
	All mineral operations.....	3,318.3	649	62	66	133	66	25	311	213	308	30	72	1,152
10	Metal mining.....	1,186.0	62	2	10	6	9	4	13	15	46	5	5	79
1011	Iron ores.....	656.4	25	-	7	2	1	1	6	2	22	1	1	22
1021	Copper ores.....	445.2	20	2	1	2	7	2	6	10	9	3	2	9
103	Lead and zinc ores.....	16.4	7	-	-	-	-	-	-	1	7	1	-	19
1032	Lead ores.....	10.5	4	-	-	-	-	-	-	-	4	-	-	5
1033	Zinc ores.....	5.8	3	-	-	-	-	-	-	1	3	1	-	14
109	Miscellaneous metal ores.....	48.7	6	-	1	-	-	1	1	1	4	-	-	19
1094	Uranium-radium-vanadium ores.....	8.5	4	-	-	-	-	1	1	1	2	-	-	10
11	Anthracite mining.....	8.2	-	-	-	-	-	-	-	-	-	-	-	24
12	Bituminous coal and lignite mining	96.5	95	2	30	23	1	1	6	14	84	18	10	100
13	Oil and gas extraction.....	1,234.8	329	57	19	95	52	20	283	180	40	6	51	540
131	Crude petroleum and natural gas.....	145.0	128	21	13	55	11	5	107	24	30	4	15	454
1312	Crude petroleum.....	139.0	124	21	13	54	11	5	104	22	30	4	14	421
1313	Natural gas.....	6.0	4	-	-	1	-	-	3	2	-	-	1	33
1321	Natural gas liquids.....	1,089.6	201	36	6	40	41	15	176	156	10	2	36	71
138	Oil and gas field services.....	.3	-	-	-	-	-	-	-	-	-	-	-	15
14	Nonmetallic minerals, except fuels	792.7	163	1	7	9	4	-	9	4	138	1	6	409
142	Crushed and broken stone.....	21.9	24	-	1	3	1	-	-	-	19	-	1	103
1422	Crushed and broken limestone.....	18.5	18	-	1	2	1	-	-	-	15	-	-	63
144	Sand and gravel.....	121.3	99	1	3	3	-	-	-	1	92	1	3	251
1442	Construction sand and gravel.....	86.1	83	1	1	3	-	-	-	-	79	1	2	232
1443	Glass sand.....	25.7	9	-	2	-	-	-	-	1	7	-	-	7
145	Clay and related minerals.....	9.3	7	-	2	-	2	-	1	-	4	-	-	17
1455	Kaolin and ball clay.....	5.4	3	-	1	-	2	-	1	-	1	-	-	5
1459	Clay and related minerals, n.e.c.	1.8	3	-	-	-	-	-	-	-	3	-	-	3
147	Chemical and fertilizer minerals....	635.7	28	-	-	1	1	-	8	2	19	-	2	27
1474	Potash, soda, and borate minerals.....	56.1	4	-	-	1	-	-	2	1	1	-	-	5
1475	Phosphate rock.....	554.5	13	-	-	-	-	-	1	1	13	-	2	5
1477	Sulfur.....	13.6	5	-	-	-	-	-	5	-	-	-	-	10

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero.

TABLE 7. Gross Water Used and Number of Establishments Treating Water Prior to Recirculation or Reuse by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	Industry group and industry	Gross water used, including recirculation or reuse (billion gallons)	Number of establishments treating water prior to recirculation or reuse											No treatment performed
			Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Flotation	Other	
	United States, total.....	3,318.3	649	62	66	133	66	25	311	213	308	30	72	1,152
	New England Division.....	1.4	2	-	-	1	-	-	-	-	1	-	-	25
	Middle Atlantic Division.....	88.2	40	1	10	10	1	-	4	5	35	5	3	107
	New York.....	15.9	10	1	1	4	-	-	-	1	9	-	-	35
	New Jersey.....	25.7	3	-	2	-	-	-	-	-	2	-	-	13
	Pennsylvania.....	46.6	27	-	7	6	1	-	4	4	24	5	3	59
12	Bituminous coal and lignite mining....	16.9	15	-	7	5	-	-	2	2	14	4	1	18
14	Nonmetallic minerals, except fuels....	15.0	10	-	-	-	1	-	-	-	8	-	1	12
	East North Central Division.....	181.0	74	6	9	12	3	1	14	11	62	3	6	162
	Ohio.....	8.6	13	-	2	1	-	-	1	1	10	-	3	59
14	Nonmetallic minerals, except fuels....	8.1	7	-	-	-	-	-	-	-	6	-	1	54
	Indiana.....	17.5	20	1	1	3	-	-	3	-	18	1	-	23
12	Bituminous coal and lignite mining....	9.4	8	-	-	-	-	-	-	-	8	-	-	-
13	Oil and gas extraction.....	.2	3	1	1	3	-	-	3	-	1	1	-	8
14	Nonmetallic minerals, except fuels....	7.9	9	-	-	-	-	-	-	-	9	-	-	15
	Illinois.....	35.9	31	4	4	6	2	-	8	7	25	1	1	44
12	Bituminous coal and lignite mining....	19.4	13	-	-	-	-	-	-	4	12	-	1	14
13	Oil and gas extraction.....	8.2	8	4	4	6	2	-	8	3	3	1	-	21
14	Nonmetallic minerals, except fuels....	8.3	10	-	-	-	-	-	-	-	10	-	-	9
	Michigan.....	116.7	6	1	2	1	1	1	2	2	6	-	1	28
10	Metal mining.....	114.1	6	1	2	1	1	1	2	2	6	-	1	7
	Wisconsin.....	2.3	4	-	-	1	-	-	-	1	3	1	1	8
	West North Central Division.....	600.5	64	5	6	9	2	1	19	9	43	1	6	98
	Minnesota.....	515.0	15	-	4	1	1	1	2	-	14	-	-	22
10	Metal mining.....	513.7	12	-	4	1	1	1	2	-	11	-	-	10
14	Nonmetallic minerals, except fuels....	1.3	3	-	-	-	-	-	-	-	3	-	-	12
	Iowa.....	13.7	17	-	-	-	-	-	-	-	16	1	-	14
14	Nonmetallic minerals, except fuels....	13.7	17	-	-	-	-	-	-	-	16	1	-	14
	South Atlantic Division.....	642.2	72	2	19	15	3	1	4	9	62	14	7	121
	Virginia.....	22.2	9	-	3	1	-	-	-	1	9	2	-	6
14	Nonmetallic minerals, except fuels....	3.5	5	-	-	-	-	-	-	1	5	-	-	3
	West Virginia.....	32.5	38	2	15	13	1	1	3	8	31	12	5	39
12	Bituminous coal and lignite mining....	20.7	34	2	15	13	1	1	1	7	29	12	5	32
	North Carolina.....	47.8	3	-	-	-	-	-	-	-	3	-	-	15
14	Nonmetallic minerals, except fuels....	47.8	3	-	-	-	-	-	-	-	3	-	-	15
	South Carolina.....	5.2	5	-	-	-	-	-	-	-	5	-	-	11
	Georgia.....	31.7	6	-	1	1	2	-	1	-	3	-	-	28
	Florida.....	500.7	8	-	-	-	-	-	-	-	8	-	2	20
14	Nonmetallic minerals, except fuels....	497.2	8	-	-	-	-	-	-	-	8	-	2	16
	East South Central Division.....	47.8	33	2	6	5	1	-	8	5	26	1	1	62
	Kentucky.....	19.6	19	2	5	4	1	-	6	4	15	1	1	22
12	Bituminous coal and lignite mining....	9.9	10	-	3	2	-	-	2	1	10	-	1	12
	Tennessee.....	22.6	5	-	1	-	-	-	1	1	4	-	-	9
	West South Central Division.....	1,015.3	252	39	9	56	36	15	200	130	41	2	31	349
	Arkansas.....	8.5	7	1	-	-	-	-	2	1	5	-	-	15
13	Oil and gas extraction.....	5.6	3	1	-	-	-	-	2	1	1	-	-	10
	Louisiana.....	179.2	30	4	1	10	3	1	23	22	5	1	4	68
	Oklahoma.....	103.7	50	15	5	15	4	3	43	23	7	1	6	45
	Texas.....	723.9	165	19	3	31	29	11	132	84	24	-	21	221
13	Oil and gas extraction.....	697.8	149	19	2	30	29	11	127	84	14	-	21	198

See footnotes at end of table.

TABLE 7. Gross Water Used and Number of Establishments Treating Water Prior to Recirculation or Reuse by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Gross water used, including recirculation or reuse (billion gallons)	Number of establishments treating water prior to recirculation or reuse											No treatment performed
			Total	Aeration	Coagulation	Filtration	Softening	Ion exchange	Corrosion control	pH	Settling	Flotation	Other	
13	Mountain Division.....	610.2	73	3	6	18	12	3	46	31	22	3	14	120
	Montana.....	16.1	4	1	2	-	2	1	1	2	2	-	-	12
	Wyoming.....	29.3	10	-	1	2	2	1	7	3	-	-	-	20
	Oil and gas extraction.....	9.1	6	-	-	1	2	-	5	2	-	-	-	15
	Colorado.....	28.9	5	-	1	3	1	-	2	4	3	-	3	18
13	New Mexico.....	133.5	33	1	2	11	2	-	30	13	6	-	9	35
	Oil and gas extraction.....	87.6	28	1	1	10	2	-	28	13	4	-	8	26
	Arizona.....	164.6	11	1	-	1	2	1	4	5	5	1	1	6
	Utah.....	194.7	3	-	-	1	1	-	2	2	2	-	1	18
	Pacific Division.....	131.6	39	4	1	7	8	4	16	13	16	1	4	108
13	California.....	128.5	39	4	1	7	8	4	16	13	16	1	4	91
	Oil and gas extraction.....	73.9	22	4	-	6	8	4	15	13	2	1	4	46
14	Nonmetallic minerals, except fuels....	48.8	16	-	1	1	-	-	1	-	13	-	-	40

Note: Detailed figures may not add to totals because of independent rounding.

- Represents zero.

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968

A. INDUSTRY GROUPS AND INDUSTRIES

Code	Industry group and industry	Water discharged (billion gallons)												
		Total water discharged	Treated prior to discharge											
			Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration	Chlorination	Other, including flotation
Primary	Secondary													
	All mineral operations.....	¹ 1,365.4	² 289.0	20.0	189.3	44.3	1.2	.1	.5	114.9	17.2	13.5	9.9	66.0
10	Metal mining.....	500.6	65.4	6.9	45.4	11.2	-	-	.3	52.8	4.0	-	3.1	7.0
1011	Iron ores.....	344.4	28.8	2.8	15.4	3.2	.6	.1	.1	20.3	.1	1.8	.1	-
1021	Copper ores.....	68.2	11.9	-	-	-	-	-	-	6.9	-	-	-	3.8
103	Lead and zinc ores.....	53.9	8.3	-	15.1	1.9	-	-	-	16.7	.1	-	-	-
1032	Lead ores.....	32.2	3.8	-	14.7	-	-	-	-	13.6	-	-	-	-
1033	Zinc ores.....	21.7	4.5	-	.4	1.9	-	-	-	3.1	.1	-	-	.1
104	Gold and silver ores.....	7.4	.7	-	-	-	-	-	-	.7	-	-	-	-
109	Miscellaneous metal ores.....	19.5	11.9	4.0	9.5	5.1	-	-	-	4.9	1.3	-	-	3.2
1094	Uranium-radium-vanadium ores.....	7.1	3.0	-	2.9	1.2	-	-	-	.8	.2	-	-	1.9
11	Anthracite mining.....	10.4	4.6	-	1.6	-	-	-	-	4.2	.1	-	-	-
12	Bituminous coal and lignite mining	58.4	6.3	.3	3.5	.7	-	(Z)	(Z)	6.3	2.3	-	(Z)	1.6
13	Oil and gas extraction.....	367.4	67.1	7.7	42.4	11.1	.4	-	.2	10.3	2.5	11.4	6.6	42.4
131	Crude petroleum and natural gas.....	265.6	63.7	7.7	40.6	10.2	.4	-	-	8.9	2.0	11.3	6.6	39.7
1312	Crude petroleum.....	251.4	59.8	7.7	38.3	10.2	.4	-	-	8.9	2.0	10.9	6.6	38.2
1313	Natural gas.....	14.2	4.0	-	2.2	-	-	-	-	-	-	-	-	1.5
1321	Natural gas liquids.....	99.1	3.1	-	1.8	.9	-	-	.2	1.0	.5	.2	-	2.3
138	Oil and gas field services.....	2.7	.3	-	-	-	-	-	-	.3	-	-	-	.3
14	Nonmetallic minerals, except fuels	428.6	145.7	5.1	96.4	21.3	-	-	-	41.2	8.3	.2	.2	15.0
142	Crushed and broken stone.....	73.4	17.9	-	12.3	1.9	-	-	-	8.0	-	-	-	1.3
1422	Crushed and broken limestone.....	65.2	12.9	-	11.2	1.9	-	-	-	4.4	-	-	-	1.0
1423	Crushed and broken granite.....	2.8	1.4	-	1.1	-	-	-	-	-	-	-	-	.4
1429	Crushed and broken stone, n.e.c.	5.4	3.6	-	-	-	-	-	-	3.6	-	-	-	-
144	Sand and gravel.....	130.9	35.7	2.8	21.7	8.8	-	-	-	11.3	2.3	.1	-	-
1442	Construction sand and gravel.....	109.4	26.5	.8	18.8	8.5	-	-	-	7.0	-	.1	-	-
1443	Glass sand.....	16.5	8.7	2.0	2.6	.3	-	-	-	4.1	2.3	-	-	-
145	Clay and related minerals.....	12.2	7.5	2.1	5.4	1.9	-	-	-	1.4	5.4	-	-	.7
1455	Kaolin and ball clay.....	7.9	4.8	2.0	3.9	1.9	-	-	-	1.1	3.9	-	-	-
1456	Feldspar.....	2.7	2.3	.1	1.5	-	-	-	-	-	1.2	-	-	.7
147	Chemical and fertilizer minerals....	210.0	83.4	-	56.5	8.4	-	-	-	19.9	.6	-	-	12.8
1474	Potash, soda, and borate minerals....	6.6	-	-	-	-	-	-	-	-	-	-	-	-
1475	Phosphate rock.....	174.0	65.8	-	49.1	3.2	-	-	-	15.3	.6	-	-	-
1477	Sulfur.....	21.6	16.6	-	7.2	5.2	-	-	-	3.9	-	-	-	12.8

See footnotes at end of table.

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968—Continued

A. INDUSTRY GROUPS AND INDUSTRIES

Code	Industry group and industry	Number of establishments treating water prior to discharge												
		Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration	Chlorination	Other, including flotation	No treatment performed
				Primary	Secondary									
	All mineral operations.....	660	31	304	125	15	10	25	237	64	47	30	175	1,141
10	Metal mining.....	83	4	39	17	2	3	7	46	9	2	6	12	58
1011	Iron ores.....	32	1	16	6	2	2	3	18	1	2	3	2	15
1021	Copper ores.....	12	1	2	1	-	-	2	5	3	-	-	4	17
103	Lead and zinc ores.....	16	-	7	3	-	-	2	12	1	-	-	-	10
1032	Lead ores.....	6	-	4	-	-	-	-	5	-	-	-	-	3
1033	Zinc ores.....	10	-	3	3	-	-	2	7	1	-	-	-	7
104	Gold and silver ores.....	5	-	1	-	-	1	-	4	-	-	-	-	4
109	Miscellaneous metal ores.....	15	2	10	6	-	-	-	5	4	-	1	6	10
1094	Uranium-radium-vanadium ores.....	7	-	6	4	-	-	-	3	2	-	1	4	7
11	Anthracite mining.....	7	-	2	-	-	-	-	3	2	-	-	-	17
12	Bituminous coal and lignite mining	98	10	25	17	3	5	7	70	16	-	10	9	97
13	Oil and gas extraction.....	268	10	122	38	9	1	9	39	26	41	10	133	601
131	Crude petroleum and natural gas.....	176	9	75	21	7	-	1	15	9	31	8	103	406
1312	Crude petroleum.....	161	9	66	21	7	-	1	14	8	28	8	98	384
1313	Natural gas.....	15	-	9	-	-	-	-	1	1	3	-	5	22
1321	Natural gas liquids.....	89	1	47	17	2	1	8	22	17	10	2	28	182
138	Oil and gas field services.....	3	-	-	-	-	-	-	3	-	-	-	2	13
14	Nonmetallic minerals, except fuels	204	7	116	53	1	1	2	79	11	4	4	21	368
142	Crushed and broken stone.....	49	-	28	12	-	-	1	18	-	1	-	11	78
1422	Crushed and broken limestone.....	29	-	17	10	-	-	1	13	-	1	-	6	52
1423	Crushed and broken granite.....	14	-	8	1	-	-	-	2	-	-	-	5	13
144	Sand and gravel.....	99	2	60	28	1	-	-	34	2	3	-	2	251
1442	Construction sand and gravel.....	84	1	51	25	1	-	-	28	-	2	-	2	231
1443	Glass sand.....	11	1	6	3	-	-	-	5	2	1	-	-	5
145	Clay and related minerals.....	16	4	10	2	-	-	-	5	6	-	-	1	8
1455	Kaolin and ball clay.....	7	3	6	2	-	-	-	2	3	-	-	-	1
1456	Feldspar.....	4	1	3	-	-	-	-	-	2	-	-	1	2
147	Chemical and fertilizer minerals....	32	1	12	7	-	1	1	18	2	-	2	7	23
1474	Potash, soda, and borate minerals.....	-	-	-	-	-	-	-	-	-	-	-	-	-
1475	Phosphate rock.....	13	-	7	3	-	-	1	7	2	-	1	-	5
1477	Sulfur.....	12	-	4	3	-	-	-	5	-	-	-	7	3

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero.

(Z) Less than 50 million gallons.

¹Included mine water drained and discharged in addition to other water used and discharged.

²Excludes mine water drained, treated, and discharged. However, the figures for water treated by type of treatment include mine water drained, treated, and discharged.

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Water discharged (billion gallons)												
		Total water discharged	Treated prior to discharge											
			Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration	Chlorination	Other, including flotation
					Primary	Secondary								
	United States, total.....	1,365.4	289.0	20.0	189.3	44.3	1.2	.1	.5	114.9	17.2	13.5	9.9	66.0
	New England Division.....	3.3	.9	-	.9	(D)	-	-	-	-	(D)	-	-	-
	Middle Atlantic Division.....	75.3	24.3	(D)	16.6	3.6	-	(D)	-	17.1	4.1	(D)	(Z)	3.5
	New York.....	11.0	6.3	-	2.4	(D)	-	-	-	4.1	-	(D)	-	(D)
	New Jersey.....	12.0	4.3	(D)	(D)	(D)	-	-	-	(D)	-	-	-	-
	Pennsylvania.....	52.3	13.7	(D)	11.9	1.2	-	(D)	(D)	10.8	4.1	(D)	(Z)	3.4
11	Anthracite mining.....	9.5	4.6	-	(D)	-	-	-	-	(D)	(D)	-	-	-
12	Bituminous coal and lignite mining....	12.6	1.2	(D)	2.0	.1	-	(D)	(D)	3.0	1.9	-	(Z)	1.5
14	Nonmetallic minerals, except fuels....	16.1	6.1	-	6.4	1.1	-	-	-	3.0	(D)	-	-	-
	East North Central Division.....	100.6	30.0	3.2	17.2	6.7	(D)	(D)	(Z)	13.7	.2	.1	(D)	.5
	Ohio.....	21.3	3.8	-	1.1	(D)	(D)	(D)	-	2.7	(D)	(D)	(D)	-
14	Nonmetallic minerals, except fuels....	20.3	3.3	-	1.1	(D)	-	(D)	-	2.2	-	(D)	(D)	-
	Indiana.....	10.6	4.1	-	3.1	3.0	-	-	-	1.0	-	(D)	-	(D)
14	Nonmetallic minerals, except fuels....	6.2	4.1	-	3.1	3.0	-	-	-	1.0	-	-	-	-
	Illinois.....	22.9	2.5	(D)	1.3	.5	(D)	-	(D)	1.2	(D)	(D)	(D)	(D)
12	Bituminous coal and lignite mining....	4.2	.4	-	(D)	(D)	(D)	-	(D)	(D)	-	-	-	-
13	Oil and gas extraction.....	11.8	1.0	(D)	.9	(D)	-	-	-	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels....	6.9	1.1	-	(D)	(D)	-	-	-	1.1	-	-	-	-
	Michigan.....	40.8	17.6	(D)	11.5	(D)	-	-	(D)	7.9	(D)	-	-	(D)
10	Metal mining.....	20.5	7.6	(D)	5.3	(D)	-	-	(D)	(D)	(D)	-	-	-
14	Nonmetallic minerals, except fuels....	18.7	9.9	-	6.1	(D)	-	-	(D)	(D)	-	-	-	(D)
	Wisconsin.....	5.0	2.0	-	(D)	(D)	-	-	(D)	(D)	(D)	-	-	-
10	Metal mining.....	4.0	2.0	-	-	-	-	-	(D)	(D)	(D)	-	-	-
	West North Central Division.....	368.1	27.9	-	26.4	1.4	(D)	(D)	(D)	28.1	(D)	.6	(D)	2.7
	Minnesota.....	320.4	18.1	-	7.2	(D)	(D)	(D)	(D)	15.5	-	-	(D)	(D)
	Iowa.....	12.4	3.6	-	3.6	(D)	-	-	-	-	-	-	-	-
14	Nonmetallic minerals, except fuels....	12.4	3.6	-	3.6	(D)	-	-	-	-	-	-	-	-
	South Atlantic Division.....	272.0	77.6	4.9	58.0	8.1	-	(D)	(D)	16.1	6.5	-	.1	3.3
	Virginia.....	10.1	2.4	(D)	.6	-	-	-	-	(D)	(D)	-	(D)	(D)
	West Virginia.....	28.3	2.4	.2	.6	.6	-	(D)	(D)	2.7	(D)	-	(D)	.3
12	Bituminous coal and lignite mining....	22.8	2.0	.2	.3	.3	-	(D)	(D)	2.5	(D)	-	(D)	-
	North Carolina.....	39.4	24.3	(D)	21.3	(D)	-	-	-	(D)	(D)	-	-	1.7
14	Nonmetallic minerals, except fuels....	39.4	24.3	(D)	21.3	(D)	-	-	-	(D)	(D)	-	-	1.7
	Georgia.....	15.3	9.3	3.8	6.0	(D)	-	-	-	5.0	4.1	-	-	(D)
	Florida.....	166.5	39.0	-	29.2	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)
14	Nonmetallic minerals, except fuels....	164.9	37.8	-	29.2	(D)	-	-	(D)	(D)	(D)	-	(D)	-
	East South Central Division.....	39.4	16.4	(D)	4.9	2.9	-	(D)	(D)	9.5	(D)	(D)	(D)	.6
	Kentucky.....	7.3	3.0	(D)	2.9	2.6	-	(D)	(D)	(D)	-	-	(D)	-
12	Bituminous coal and lignite mining....	3.2	.2	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-
	Tennessee.....	12.8	10.1	-	-	(D)	-	-	(D)	8.4	(D)	(D)	-	-
10	Metal mining.....	4.4	1.9	-	-	(D)	-	-	(D)	(D)	(D)	-	-	-
14	Nonmetallic minerals, except fuels....	8.4	8.2	-	-	(D)	-	-	-	(D)	(D)	(D)	-	-
	Alabama.....	10.0	1.9	(D)	.6	(D)	-	-	-	1.1	-	-	-	(D)
12	Bituminous coal and lignite mining....	4.7	1.0	(D)	(D)	(D)	-	-	-	(D)	-	-	-	-
14	Nonmetallic minerals, except fuels....	2.8	.4	-	(D)	-	-	-	-	-	-	-	-	(D)
	Mississippi.....	9.2	1.4	-	(D)	-	-	-	-	(D)	-	-	-	(D)

See footnotes at end of table.

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Number of establishments treating water prior to discharge												
		Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration	Chlorination	Other, including flotation	No treatment performed
				Primary	Secondary									
	United States, total.....	660	31	304	125	15	10	25	237	64	47	30	175	1,141
	New England Division.....	5	-	5	2	-	-	-	-	1	-	-	-	22
	Middle Atlantic Division.....	65	3	27	14	-	2	3	36	13	2	6	9	82
	New York.....	14	-	6	2	-	-	-	7	-	1	-	2	31
	New Jersey.....	3	2	2	2	-	-	-	1	-	-	-	-	13
	Pennsylvania.....	48	1	19	10	-	2	3	28	13	1	6	7	38
11	Anthracite mining.....	7	-	2	-	-	-	-	3	2	-	-	-	15
12	Bituminous coal and lignite mining....	25	1	6	4	-	1	2	17	10	-	5	6	8
14	Nonmetallic minerals, except fuels....	14	-	9	6	-	-	-	7	1	-	-	-	8
	East North Central Division.....	77	4	37	21	3	1	4	39	5	4	2	5	159
	Ohio.....	27	-	7	2	2	1	-	18	2	1	1	-	45
14	Nonmetallic minerals, except fuels....	18	-	7	2	-	1	-	9	-	1	1	-	43
	Indiana.....	15	-	11	9	-	-	-	4	-	1	-	1	28
14	Nonmetallic minerals, except fuels....	14	-	11	9	-	-	-	4	-	-	-	-	10
	Illinois.....	18	3	8	5	1	-	1	10	1	2	1	3	57
12	Bituminous coal and lignite mining....	4	-	3	1	1	-	1	2	-	-	-	-	23
13	Oil and gas extraction.....	7	3	4	3	-	-	-	1	1	2	1	3	22
14	Nonmetallic minerals, except fuels....	7	-	1	1	-	-	-	7	-	-	-	-	12
	Michigan.....	14	1	10	3	-	-	2	5	1	-	-	1	20
10	Metal mining.....	8	1	5	2	-	-	1	3	1	-	-	-	5
14	Nonmetallic minerals, except fuels....	5	-	4	1	-	-	1	2	-	-	-	1	10
	Wisconsin.....	3	-	1	2	-	-	1	2	1	-	-	-	9
10	Metal mining.....	3	-	1	2	-	-	1	2	1	-	-	-	1
	West North Central Division.....	51	-	26	7	3	1	2	20	2	6	2	13	111
	Minnesota.....	18	-	7	3	1	1	1	13	-	-	1	2	19
	Iowa.....	5	-	5	2	-	-	-	-	-	-	-	-	26
14	Nonmetallic minerals, except fuels....	5	-	5	2	-	-	-	-	-	-	-	-	26
	South Atlantic Division.....	95	11	37	15	-	3	2	50	12	-	4	15	98
	Virginia.....	9	1	4	-	-	-	-	3	2	-	1	1	6
	West Virginia.....	42	5	10	8	-	3	1	34	3	-	2	4	35
12	Bituminous coal and lignite mining....	38	5	8	6	-	3	1	32	3	-	2	3	28
	North Carolina.....	12	1	4	1	-	-	-	3	1	-	-	7	6
14	Nonmetallic minerals, except fuels....	12	1	4	1	-	-	-	3	1	-	-	7	6
	Georgia.....	18	4	11	3	-	-	-	7	4	-	-	1	16
	Florida.....	11	-	6	3	-	-	1	3	1	-	1	2	17
14	Nonmetallic minerals, except fuels....	9	-	6	3	-	-	1	3	1	-	1	-	15
	East South Central Division.....	37	3	14	9	-	1	3	12	2	1	1	6	58
	Kentucky.....	12	2	6	5	-	1	2	2	-	-	1	3	29
12	Bituminous coal and lignite mining....	5	2	2	2	-	1	2	2	-	-	1	-	17
	Tennessee.....	8	-	-	2	-	-	1	4	2	1	-	-	6
10	Metal mining.....	3	-	-	1	-	-	1	1	1	-	-	-	2
14	Nonmetallic minerals, except fuels....	5	-	-	1	-	-	-	3	1	1	-	-	4
	Alabama.....	12	1	5	2	-	-	-	5	-	-	-	1	12
12	Bituminous coal and lignite mining....	5	1	1	2	-	-	-	3	-	-	-	-	4
14	Nonmetallic minerals, except fuels....	4	-	3	-	-	-	-	-	-	-	-	1	3
	Mississippi.....	5	-	3	-	-	-	-	1	-	-	-	2	11

See footnotes at end of table.

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Water discharged (billion gallons)												
		Total water discharged	Treated prior to discharge										Other, including flotation	
			Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration		Chlorination
Primary	Secondary													
13	West South Central Division.....	301.6	54.2	3.1	33.7	13.0	(D)	-	(Z)	6.1	2.5	6.2	3.2	31.1
	Arkansas.....	5.4	3.2	(D)	2.2	1.7	-	-	-	(D)	(D)	-	-	(D)
	Oil and gas extraction.....	3.1	1.5	-	(D)	-	-	-	-	(D)	(D)	-	-	(D)
	Louisiana.....	140.4	15.3	-	17.6	1.8	(D)	-	(D)	.9	.1	(D)	-	9.2
13	Oklahoma.....	36.2	8.7	(D)	1.7	(D)	(D)	-	-	(D)	(D)	1.2	-	7.0
	Texas.....	119.7	27.0	(D)	12.3	8.5	-	-	(D)	4.9	2.3	4.9	3.2	13.6
	Oil and gas extraction.....	97.7	17.8	(D)	5.5	3.8	-	-	(D)	1.4	2.2	4.9	3.2	8.1
	Mountain Division.....	146.9	31.1	(D)	16.3	3.2	-	(D)	.2	21.2	1.5	4.2	6.4	14.4
13	Montana.....	8.3	3.9	(D)	(D)	(D)	-	-	-	(D)	(D)	-	-	3.8
	Wyoming.....	24.9	4.4	-	5.8	(D)	-	-	-	(D)	-	(D)	(D)	5.9
	Oil and gas extraction.....	20.6	3.3	-	(D)	-	-	-	-	(D)	-	(D)	-	5.9
	Colorado.....	12.1	8.3	(D)	5.7	.8	-	-	(D)	4.7	.4	(D)	6.2	(D)
10	Metal mining.....	6.9	5.0	-	3.6	.8	-	-	-	4.5	(D)	-	(D)	(D)
	Oil and gas extraction.....	4.1	3.4	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
13	New Mexico.....	16.3	2.6	-	1.9	(D)	-	-	(D)	.2	(D)	(D)	-	1.7
	Oil and gas extraction.....	9.1	1.3	-	.3	-	-	-	(D)	.2	(D)	(D)	-	.8
	Arizona.....	16.8	2.6	-	-	-	-	-	(D)	(D)	-	-	-	(D)
	Utah.....	29.1	5.6	-	(D)	(D)	-	(D)	(D)	4.0	-	(D)	(D)	(D)
10	Metal mining.....	24.8	4.2	-	(D)	(D)	-	-	-	(D)	-	-	-	(D)
	Oil and gas extraction.....	3.6	1.2	-	(D)	-	-	(D)	-	(D)	-	(D)	-	(D)
13	Pacific Division.....	58.3	26.6	(D)	15.4	5.2	.5	-	(D)	3.1	-	(D)	(D)	9.8
	Washington.....	4.7	.4	-	(D)	(D)	-	-	-	(D)	-	-	-	-
	California.....	49.6	23.5	(D)	12.7	5.1	.5	-	(D)	2.6	-	(D)	(D)	9.8
	Oil and gas extraction.....	30.4	19.8	(D)	10.9	4.7	.4	-	-	(D)	-	(D)	(D)	9.8
14	Nonmetallic minerals, except fuels....	13.2	2.8	(D)	.9	(D)	(D)	-	-	1.4	-	-	-	-

TABLE 8. Water Discharged, Water Treated Prior to Discharge and Number of Establishments Treating Water Prior to Discharge by Type of Treatment: 1968—Continued

B. STATES AND MAJOR INDUSTRY GROUPS

Code	State and major industry group	Number of establishments treating water prior to discharge												
		Total	Coagulation	Settling		Trickling filters	Activated sludge	Digestion	Ponds or lagoons	pH	Sand filtration	Chlorination	Other, including flotation	No treatment performed
				Primary	Secondary									
13	West South Central Division.....	201	5	95	35	3	-	4	34	22	26	5	93	400
	Arkansas.....	10	1	8	5	-	-	-	2	1	-	-	3	12
	Oil and gas extraction.....	4	-	2	-	-	-	-	1	1	-	-	3	9
	Louisiana.....	36	-	19	8	2	-	2	7	4	3	-	17	62
13	Oklahoma.....	30	1	13	3	1	-	-	2	3	5	-	18	65
	Texas.....	125	3	55	19	-	-	2	23	14	18	5	55	261
	Oil and gas extraction.....	112	3	47	13	-	-	2	15	13	17	5	53	235
	Mountain Division.....	69	2	28	9	-	2	6	31	7	5	8	23	124
13	Montana.....	5	1	3	1	-	-	-	1	1	-	-	4	11
	Wyoming.....	9	-	4	1	-	-	-	3	-	1	1	5	21
	Oil and gas extraction.....	6	-	2	-	-	-	-	1	-	1	-	5	15
	Colorado.....	12	1	6	4	-	-	1	7	4	1	5	3	11
10	Metal mining.....	6	-	5	4	-	-	-	5	2	-	3	2	-
13	Oil and gas extraction.....	4	1	1	-	-	-	1	2	1	1	1	1	6
13	New Mexico.....	18	-	9	1	-	-	2	8	1	2	-	8	50
	Oil and gas extraction.....	13	-	5	-	-	-	2	6	1	2	-	7	41
	Arizona.....	4	-	-	-	-	-	2	1	-	-	-	1	13
	Utah.....	10	-	1	1	-	1	1	4	-	1	2	2	11
10	Metal mining.....	4	-	1	1	-	-	-	3	-	-	-	1	2
13	Oil and gas extraction.....	3	-	-	-	-	1	-	1	-	1	-	1	6
13	Pacific Division.....	60	3	35	13	6	-	1	15	-	3	2	11	87
	Washington.....	3	-	1	1	-	-	-	3	-	-	-	-	8
	California.....	54	3	33	12	6	-	1	10	-	3	2	11	76
	Oil and gas extraction.....	32	2	20	10	5	-	1	2	-	3	2	11	36
14	Nonmetallic minerals, except fuels....	19	1	11	2	1	-	-	7	-	-	-	-	37

Note: Detailed figures may not add to totals because of independent rounding.

- Represents zero. (Z) Less than 50 million gallons.

¹See table 8A, footnote 1.

TABLE 9. Water Intake by Purpose, Gross Water Used, and Water Treated and Discharged by Point of Discharge for Establishments Treating Water Prior to Discharge: 1968

(Water data in billions of gallons)

Code	Industry group	All employees (number)	Water intake by purpose							Gross water used, including recirculation or reuse
			Total water intake	Process	Air conditioning	Steam electric power generation	Other Cooling and condensing	Boiler feed, sanitary service, and other uses	Oil and gas field flooding	
	All mineral operations.....	98.4	705.3	476.0	.7	57.7	37.4	19.6	113.9	2,087.1
10	Metal mining.....	29.4	184.5	108.8	.7	55.4	9.8	9.9	-	691.1
101	Iron ores.....	14.4	97.1	39.8	.2	53.5	1.7	1.9	-	353.2
102	Coper ores.....	6.5	49.2	44.3	.3	1.1	1.7	1.9	-	259.2
103	Lead and zinc ores.....	4.1	14.1	6.4	.1	-	3.0	4.5	-	16.8
104	Gold and silver ores.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
109	Miscellaneous metal ores.....	3.2	18.7	13.8	.1	.8	2.8	1.2	-	48.2
11	Anthracite mining.....	.3	4.6	4.6	-	-	-	(Z)	-	4.8
12	Bituminous coal and lignite mining.....	28.2	10.9	10.4	-	-	.1	.4	-	51.6
13	Oil and gas extraction.....	25.3	157.9	22.8	(Z)	.7	15.0	5.5	113.9	673.1
131	Crude petroleum and natural gas.....	22.2	143.2	22.4	(Z)	.3	5.0	2.2	113.3	167.3
132	Natural gas liquids.....	3.1	14.4	.4	(Z)	.3	10.1	3.3	.2	505.5
138	Oil and gas field services.....	(Z)	.3	-	-	-	-	-	.3	.3
14	Nonmetallic minerals, except fuels.....	15.2	347.4	329.4	(Z)	1.7	12.5	3.7	-	666.6
141	Dimension stone.....	.1	.2	.2	-	-	-	-	-	.3
142	Crushed and broken stone.....	3.7	22.3	21.8	-	.3	(Z)	.1	-	27.2
144	Sand and gravel.....	2.7	49.5	48.7	-	.2	.4	.2	-	72.0
145	Clay and related minerals.....	2.5	8.8	6.8	(Z)	1.1	.7	.2	-	10.8
147	Chemical and fertilizer minerals.....	5.5	261.3	246.9	(Z)	-	11.3	3.0	-	550.8
149	Miscellaneous nonmetallic minerals.....	.7	5.2	5.0	-	.1	-	.1	-	5.4
Code	Industry group	Water used and discharged by point of discharge						Mine water drained and discharged	Water treated prior to discharge	
		Total	Public utility sewer	Surface water body	Tidewater body	Ground	Transferred to other users			
	All mineral operations.....	516.6	1.5	329.3	64.5	106.4	15.0	120.3	289.0	
10	Metal mining.....	137.5	.3	126.1	-	10.2	.9	36.6	65.4	
101	Iron ores.....	86.7	.1	83.7	-	3.0	-	13.7	28.8	
102	Copper ores.....	20.2	.1	16.1	-	3.4	.6	1.5	11.9	
103	Lead and zinc ores.....	10.7	(Z)	9.1	-	1.5	.1	16.5	8.3	
104	Gold and silver ores.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
106	Ferroalloy ores, except vanadium.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
109	Miscellaneous metal ores.....	15.4	.1	13.7	-	1.5	.1	.7	11.9	
11	Anthracite mining.....	4.6	-	4.3	-	.4	-	(Z)	4.6	
12	Bituminous coal and lignite mining.....	8.1	.1	6.8	-	1.2	.1	28.1	6.3	
13	Oil and gas extraction.....	111.7	1.1	11.4	16.4	80.6	2.2	126.8	67.1	
131	Crude petroleum and natural gas.....	107.6	1.1	9.7	16.2	78.8	1.8	25.7	63.7	
132	Natural gas liquids.....	3.8	(Z)	1.7	.2	1.5	.4	-	3.1	
138	Oil and gas field services.....	.3	-	-	-	.3	-	1.1	.3	
14	Nonmetallic minerals, except fuels.....	254.7	.1	180.6	48.2	14.0	11.8	28.7	145.7	
141	Dimension stone.....	.2	-	.2	-	-	-	-	.2	
142	Crushed and broken stone.....	20.2	(Z)	14.6	3.7	1.0	.8	17.9	17.9	
144	Sand and gravel.....	44.0	(Z)	27.8	8.7	2.3	5.1	5.6	35.7	
145	Clay and related minerals.....	8.0	(Z)	7.7	.1	.1	(Z)	-	7.5	
147	Chemical and fertilizer minerals.....	181.4	(Z)	129.4	35.6	10.6	5.7	5.2	83.4	
149	Miscellaneous nonmetallic minerals.....	.9	.1	.7	-	(Z)	.1	(Z)	.9	

Note: Detailed figures may not add to totals because of independent rounding. The figures shown for industry groups include data for all component industries whether or not separate figures are shown for the individual industries in the group.

- Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (Z) Less than 50 million gallons.

¹See table 1A, footnote 2.



EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees—The category “all employees” comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for “production, development, and exploration workers” for four selected pay periods (mid-March, May, August, and November). For “all other employees” only a mid-March figure was requested. Thus, the “annual average” is composed of an average of the four monthly figures for “production, development, and exploration workers” plus the March figure for “all other employees.”

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The "costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes

(other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Water Use—Water Intake is defined as water supplied to a minerals establishment by a public water system or by a water system owned by the establishment. Mine water used to produce or process minerals is also included. *Gross Water Used* represents the estimated quantity of water that would have been required if no water had been recirculated or reused. For example, if total water intake was 400 million gallons and of this 400 million gallons, 100 million gallons were used twice for cooling purposes and once for washing minerals products, the total water required would be 300 million gallons plus the 300 million gallons not recirculated, for a total of 600 million gallons (less consumption and evaporation loss). *Water Discharged* comprises all water brought to the ultimate discharge point and then discharged. This excludes water held in ponds, lagoons, or settling basins for reuse or treatment and also excludes water lost by evaporation. Mine water drained and discharged (but not used to produce or process minerals) was reported separately. *Water Treated* represents all water treated for control of biological growth; removal of suspended or dissolved solids; corrosion control; or for any other purpose, either by simple or complex methods of treatment.



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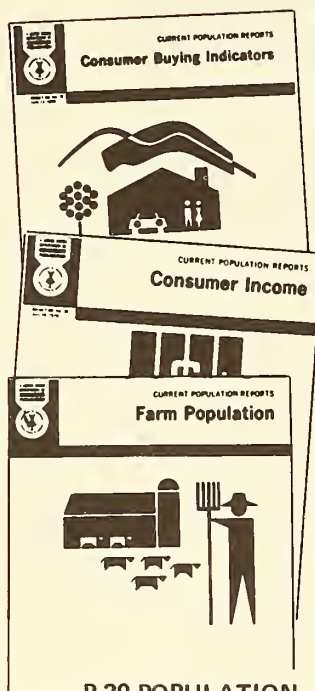
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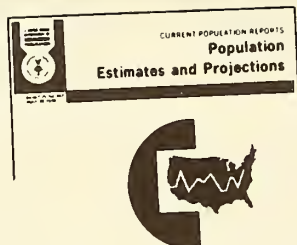
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U.S. DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

From the Bureau of the Census

1967 CENSUS OF Mineral Industries



MIC67(1)-3

SUBJECT SERIES

Expenditures for Plant and Equipment

Issued June 1971



U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
James T. Lynn, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 5 subject reports. Additional separate reports will be issued for individual industries or groups of related industries and for each State. Other reports in this series cover a general summary, size of establishment, and type of operation.

These previously issued reports show figures for industries of States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used. In addition, the State reports contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The Introduction to the General Summary report of the 1967 Census of Mineral Industries discusses at greater length many of the subjects described briefly in this introduction. For example, the General Summary text discusses the economic significance of the mining sector; the relation of value added in mining to national income originating in mining; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was

possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the

United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST
New England
Middle Atlantic

SOUTH
South Atlantic
East South Central
West South Central

NORTH CENTRAL
East North Central
West North Central

WEST
Mountain
Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.



Contents

	page
TABLE 1 Capital Expenditures: 1967 and Earlier Years	3
2 Capital Expenditures, by Industry Groups and Industries: 1967 and 1963	4
3 Capital Expenditures, by Divisions and States: 1967 and 1963	6
APPENDIX Explanation of Terms	A1



TABLE 1. Capital Expenditures: 1967 and Earlier Years

(Million dollars)

Kind of operation and year	Total	Development and ex- ploration of mineral property	Preparation plant and other construction	New machinery and equipment	Used plant and equipment
Mineral industries only:					
1967.....	4,057.8	1,501.1	751.5	1,672.4	132.8
1963.....	3,263.6	1,431.7	505.9	1,133.3	192.8
1958.....	2,804.1	1,144.3	¹ 466.4	¹ 1,095.3	¹ 98.1
1954.....	2,726.2	1,309.5	313.7	992.6	110.4
Including operations in manufactures:²					
All operations:					
1967.....	4,061.0	³ 1,501.1	752.2	1,674.8	132.8
1963.....	3,267.6	³ 1,431.7	506.3	1,136.1	193.5
1958.....	2,806.6	³ 1,144.3	¹ 466.6	¹ 1,097.4	¹ 98.3
1954.....	2,728.1	1,309.6	314.0	993.8	110.6
Excluding oil and gas extraction industries:					
1967.....	1,056.5	99.8	261.5	634.9	60.2
1963.....	715.9	89.4	177.8	389.8	54.9
1958.....	612.6	65.6	206.8	300.5	39.6
1954.....	499.9	79.7	155.1	224.2	40.8

¹Figures for preparation plant and other construction and for used plant and equipment in Alaska and Hawaii are included with those for new machinery and equipment.

²Includes only mining operations of the Cut Stone and Stone Products industry (SIC 3281).

³Excludes mining operations in manufactures.

TABLE 2. Capital Expenditures, by Industry Groups and Industries: 1967 and 1963

Code	Industry group and industry	(Million dollars)									
		1967					1963				
		Total	Mineral development and exploration	New structures and additions	New machinery and equipment	Used plant and equipment	Total	Mineral development and exploration	New structures and additions	New machinery and equipment	Used plant and equipment
	All mineral operations.....	4,057.8	1,501.1	751.5	1,672.4	132.8	3,263.6	1,431.7	505.9	1,133.3	192.8
10	Metal mining.....	339.9	55.0	121.8	156.7	6.3	230.9	65.0	83.9	75.2	6.8
1011	Iron ores.....	108.8	8.1	60.8	38.2	1.7	96.6	23.3	51.7	19.1	2.6
1021	Copper ores.....	122.1	20.4	23.5	74.9	3.4	87.1	23.1	24.7	39.0	.2
1031	Lead and zinc ores.....	43.7	11.3	15.0	17.1	.3	11.9	6.9	1.1	3.6	.3
	Lead ores subindustry.....	34.2	7.7	14.2	12.2	.2	6.1	4.1	.3	1.8	(Z)
	Zinc ores subindustry.....	9.5	3.6	.9	4.9	.1	5.8	2.9	.8	1.8	.3
104	Gold and silver ores.....	4.4	2.0	.2	2.1	.1	7.2	4.5	.7	1.5	.5
1042	Lode gold.....	1.5	.3	(Z)	1.2	(Z)	2.9	1.9	.2	.6	.2
1043	Placer gold.....	.3	.1	.1	.1	(Z)	1.0	.4	.3	.3	.1
1044	Silver ores.....	2.6	1.7	.1	.8	.1	3.3	2.3	.2	.6	.3
1051	Bauxite and other aluminum ores.....	.4	(Z)	.1	.3	(Z)	.3	(Z)	(Z)	.2	-
106	Ferroalloy ores, except vanadium.....	12.7	1.0	2.0	9.4	.2	5.8	2.4	1.3	2.1	.1
1062	Manganese ores.....	.2	(Z)	(Z)	.2	(Z)	.4	.1	(Z)	.2	(Z)
1064	Tungsten ores.....										
1069	Ferroalloy ores, n.e.c.	12.5	1.0	2.0	9.2	.2	5.4	2.3	1.2	1.8	.1
1081	Metal mining services.....	2.3	(Z)	(Z)	2.1	.2	3.0	(X)	.1	2.7	.3
109	Miscellaneous metal ores.....	45.5	12.2	20.2	12.6	.4	19.0	4.8	4.3	7.1	2.8
1092	Mercury ores.....	(D)	(D)	(D)	(D)	(D)	.3	.1	(Z)	.1	.1
1093	Titanium ores.....	1.3	(Z)	(Z)	1.3	(Z)	2.2	(X)	.1	2.1	(Z)
1094	Uranium-radium-vanadium ores.....	40.5	11.9	17.6	10.8	.2	15.9	4.4	4.1	4.7	2.7
1099	Metallic ores, n.e.c.	(D)	(D)	(D)	(D)	(D)	.6	.3	(Z)	.2	(Z)
11	Anthracite mining.....	6.4	.4	.5	4.7	.7	15.1	.1	4.2	8.1	1.9
1111	Anthracite.....	5.0	.4	.5	3.5	.5	12.7	.1	4.2	6.3	1.3
1112	Anthracite mining services.....	1.4	(Z)	(Z)	1.2	.2	2.5	(X)	(Z)	1.8	.6
12	Bituminous coal and lignite mining.....	334.3	20.3	71.6	218.9	23.4	218.3	7.3	38.4	152.2	20.3
1211	Bituminous coal.....	329.5	20.3	71.4	214.7	23.1	210.8	7.3	38.1	145.7	19.8
1212	Lignite.....	1.5	(Z)	.1	1.3	.1	4.6	(Z)	.2	4.3	.1
1213	Bituminous and lignite mining services, n.e.c.	3.3	(Z)	.1	3.0	.2	2.9	(X)	.1	2.3	.5
13	Oil and gas extraction.....	3,004.5	1,401.3	490.7	1,040.0	72.6	2,551.7	1,342.3	328.0	743.4	138.0
1311	Crude petroleum and natural gas.....	2,541.7	1,372.4	364.8	759.2	45.3	2,209.9	1,329.6	235.4	546.2	98.7
	Crude petroleum subindustry.....	2,066.1	1,114.0	293.6	622.1	36.4	1,906.5	1,148.6	191.5	472.2	94.2
	Natural gas subindustry.....	475.6	258.4	71.2	137.1	8.9	303.4	180.9	44.0	74.1	4.5
1321	Natural gas liquids.....	214.4	-	112.8	98.8	2.8	113.9	(X)	70.8	40.2	2.9
138	Oil and gas field services.....	248.4	28.9	13.1	182.0	24.5	227.9	12.7	21.8	157.0	36.4
1381	Drilling oil and gas wells.....	140.4	26.5	10.0	86.7	17.2	148.0	12.4	13.5	92.6	29.5
1382	Oil and gas exploration services.....	19.9	.3	.2	19.1	.3	11.7	-	.8	10.5	.4
1389	Oil and gas field services, n.e.c.	88.2	2.1	2.9	76.2	7.0	68.1	.3	7.5	53.8	6.5
14	Nonmetallic minerals, except fuels.....	372.7	24.0	66.8	252.0	29.7	247.5	16.1	51.3	154.3	25.8
1411	Dimension stone.....	1.1	(Z)	.1	.7	.2	1.1	(Z)	.3	.5	.3
	Dimension limestone subindustry.....	.4	(Z)	(Z)	.3	.1	.2	(Z)	(Z)	.1	.1
	Dimension granite, subindustry.....	.2	(Z)	(Z)	.2	(Z)	.4	(Z)	.1	.2	.1
	Dimension stone, n.e.c., subindustry.....	.4	(Z)	.1	.2	.1	.4	(Z)	.2	.2	.1
142	Crushed and broken stone.....	109.5	2.8	13.1	78.7	14.8	82.7	1.4	18.7	50.8	11.7
1422	Crushed and broken limestone.....	78.7	2.4	10.0	54.2	12.1	59.5	1.0	11.8	37.2	9.5
1423	Crushed and broken granite.....	13.0	(Z)	1.1	11.1	0.7	7.1	.1	1.8	4.4	.8
1429	Crushed and broken stone, n.e.c.	17.8	.4	2.0	13.4	2.0	16.0	.2	5.1	9.2	1.4
144	Sand and gravel.....	94.4	3.6	15.4	62.9	12.4	75.7	1.2	14.2	49.9	10.4
1442	Construction sand and gravel.....	84.7	3.6	13.6	55.5	11.9	69.0	1.1	13.1	44.6	10.2
1446	Industrial sand.....	9.6	(Z)	1.7	7.3	.5	6.8	(Z)	1.1	5.3	.3
	Glass sand subindustry.....	3.9	(Z)	.8	2.9	.2	4.0	(Z)	.6	3.1	.2
	Molding sand subindustry.....	3.5	(Z)	.5	2.8	.2	.9	(Z)	.1	.8	(Z)
	Industrial sand, n.e.c. subindustry....	2.2	(Z)	.4	1.7	.1	1.9	(Z)	.4	1.4	.1

See footnotes at end of table.

TABLE 2. Capital Expenditures, by Industry Groups and Industries: 1967 and 1963—Continued

(Million dollars)

Code	Industry group and industry	1967					1963				
		Total	Mineral development and exploration	New structures and additions	New machinery and equipment	Used plant and equipment	Total	Mineral development and exploration	New structures and additions	New machinery and equipment	Used plant and equipment
14	Nonmetallic minerals, except fuels—Continued										
145	Clay and related minerals.....	24.0	.8	2.4	20.4	.5	14.6	1.1	3.3	9.2	1.0
1452	Bentonite.....	.9	(Z)	.2	.7	(Z)	1.3	.1	.4	.7	.2
1453	Fire clay.....	1.5	.3	.2	.9	.1	2.1	.2	.6	1.1	.3
1454	Fuller's earth.....	4.1	.2	.3	3.5	(Z)	1.2	—	.3	.8	.1
1455	Kaolin and ball clay.....	11.6	.2	.6	10.7	.1	5.2	.5	.6	4.1	.1
1456	Feldspar.....	.5	(Z)	.1	.4	(Z)	1.7	.2	.9	.5	.1
1459	Clay and related minerals, n.e.c.....	5.5	.1	.9	4.2	.3	3.0	.1	.6	2.0	.3
147	Chemical and fertilizer minerals.....	131.3	16.0	34.6	80.1	.7	60.0	10.8	11.8	36.4	1.0
1472	Barite.....	1.2	(Z)	.2	.7	.3	1.1	(Z)	.4	.5	.1
1473	Fluorspar.....	1.1	.1	.2	.7	(Z)	.3	(Z)	.2	.1	(Z)
1474	Potash, soda, and borate minerals.....	43.0	10.9	10.2	21.8	.1	26.8	7.8	4.9	13.8	.3
1475	Phosphate rock.....	47.7	3.2	6.3	38.1	.1	22.2	1.9	5.5	14.5	.3
1476	Rock salt.....	7.3	.1	1.5	5.6	.1	7.4	1.0	.5	5.7	.2
1477	Sulfur.....	30.3	1.7	16.2	12.5	.1	1.0	(Z)	.1	1.0	(Z)
1479	Chemical and fertilizers mining, n.e.c....	.7	—	(Z)	.7	(Z)	1.1	.1	.2	.8	(Z)
1481	Nonmetallic minerals services.....	1.9	(Z)	.2	1.4	.2	1.4	(Z)	.3	.9	.2
149	Miscellaneous nonmetallic minerals.....	10.5	.8	1.0	7.8	.9	11.9	1.5	2.7	6.6	1.1
1492	Gypsum.....	.6	.1	(Z)	.3	.2	1.3	.1	.2	.9	.1
1493	Mica.....	.5	(Z)	.1	.3	(Z)	.9	.1	.1	.4	.2
1494	Native asphalt and bitumens.....	.8	.3	(Z)	.3	.1	1.1	.4	.2	.5	(Z)
1495	Pumice and pumicite.....	.2	(Z)	(Z)	.2	(Z)	.7	.1	.2	.4	.1
1496	Talc, soapstone, and pyrophyllite.....	1.7	.2	.2	1.2	.1	1.1	.2	.2	.6	.1
1497	Natural abrasives, except sand.....	1.4	(Z)	(Z)	1.3	(Z)	.5	(Z)	.3	.2	(Z)
1498	Peat.....	.5	(Z)	(Z)	.4	.1	.9	(Z)	(Z)	.6	.2
1499	Nonmetallic minerals, n.e.c.	4.8	.2	.5	3.7	.4	5.5	.6	1.5	3.0	.4

TABLE 3. Capital Expenditures, by Divisions and States: 1967 and 1963

(Million dollars)

Division and state	1967					1963		
	Total	Mineral development and exploration	New structures and additions	New machinery and equipment	Used plant and equipment	Total	Mineral development and exploration	New and used structures, machinery, and equipment
United States.....	4,057.8	1,501.1	751.5	1,672.4	132.8	3,263.6	1,431.7	1,832.0
Northeast Region.....	116.0	15.1	16.3	76.0	8.4	115.6	14.2	101.5
New England Division.....	8.5	1.4	1.5	5.1	.5	7.1	.5	6.7
Maine.....	2.8	1.0	.6	1.0	.1	.3	(Z)	.3
New Hampshire.....	.8	(Z)	.1	.6	.1	.5	(Z)	.5
Vermont.....	.9	.1	.1	.6	(Z)	1.0	.4	.7
Massachusetts.....	2.2	.2	.2	1.7	.1	3.1	(Z)	3.1
Rhode Island.....	.6	(Z)	.1	.4	(Z)	.3	(Z)	.3
Connecticut.....	1.2	(Z)	.4	.7	.1	1.9	(Z)	1.9
Middle Atlantic Division.....	107.5	13.7	14.8	70.9	7.9	108.5	13.7	94.8
New York.....	15.7	1.8	1.1	10.3	2.4	15.3	3.9	11.4
New Jersey.....	6.4	.1	.9	5.1	.2	7.6	.4	7.2
Pennsylvania.....	85.4	11.8	12.8	55.5	5.3	85.6	9.4	76.2
North Central Region.....	412.0	62.4	118.9	199.7	31.3	380.3	89.8	290.4
East North Central Division.....	200.3	30.0	42.9	113.5	13.9	203.7	30.7	172.9
Ohio.....	52.3	7.6	8.6	32.3	3.9	45.8	7.5	38.4
Indiana.....	19.7	1.7	1.9	14.3	1.7	19.4	1.5	17.9
Illinois.....	68.0	10.3	16.2	36.1	5.4	57.0	10.9	46.0
Michigan.....	52.8	10.1	15.2	25.4	2.1	76.1	10.7	65.5
Wisconsin.....	7.5	.3	1.0	5.4	.7	5.4	.2	5.2
West North Central Division.....	211.7	32.4	76.0	86.2	17.4	176.6	59.1	117.5
Minnesota.....	82.1	1.6	49.8	29.1	1.6	25.2	8.8	16.4
Iowa.....	7.0	.3	.4	5.4	1.0	5.5	.2	5.2
Missouri.....	41.6	6.3	15.0	17.5	2.7	22.5	8.6	13.9
North Dakota.....	19.6	5.2	1.1	11.0	2.3	17.8	4.8	13.1
South Dakota.....	1.6	.2	.2	1.1	.1	3.0	1.2	1.7
Nebraska.....	7.2	1.1	2.4	3.1	.6	10.7	4.0	6.6
Kansas.....	52.6	17.6	7.2	18.7	9.0	92.0	31.5	60.5
South Region.....	2,489.4	962.6	462.4	992.7	71.9	2,063.2	957.3	1,105.9
South Atlantic Division.....	251.2	25.6	38.0	169.8	18.0	136.2	22.6	113.6
Delaware, Maryland, and District of Columbia.....	5.2	.1	.6	4.1	.5	4.9	.7	4.3
Virginia.....	30.4	3.0	3.7	22.1	1.7	15.0	.5	14.5
West Virginia.....	136.7	17.1	26.6	80.3	12.7	80.0	19.5	60.4
North Carolina.....	8.8	.5	1.0	6.3	1.0	4.5	.9	3.6
South Carolina.....	4.1	.1	.2	3.5	.4	2.6	(Z)	2.6
Georgia.....	20.6	.5	1.2	18.4	.5	9.5	.6	8.9
Florida.....	45.4	4.4	4.7	35.1	1.2	19.7	.4	19.3
East South Central Division.....	172.1	37.5	30.6	95.0	9.0	120.5	33.3	87.2
Kentucky.....	82.9	9.3	17.5	52.2	3.9	52.7	7.8	44.9
Tennessee.....	19.0	2.1	2.9	12.3	1.6	13.2	1.4	11.8
Alabama.....	20.9	1.8	5.1	12.8	1.2	15.6	3.8	11.8
Mississippi.....	49.4	24.3	5.1	17.7	2.3	39.1	20.3	18.8
West South Central Division.....	2,066.1	899.5	393.8	727.9	44.9	1,806.5	901.4	905.1
Arkansas.....	32.4	9.5	15.5	5.8	1.5	17.3	7.6	9.7
Louisiana.....	1,025.1	478.4	234.0	304.2	8.5	736.7	418.3	318.4
Oklahoma.....	188.6	91.9	16.4	69.9	10.4	205.0	98.8	106.2
Texas.....	820.0	319.7	127.9	348.0	24.5	847.5	376.7	470.8
West Region.....	1,040.4	461.0	153.9	404.0	21.2	704.6	370.4	334.2
Mountain Division.....	481.5	181.6	69.2	219.2	11.4	435.7	189.3	246.4
Montana.....	40.9	12.6	4.4	23.1	.8	66.7	20.1	46.6
Idaho.....	11.4	1.7	2.6	6.7	.4	5.1	1.7	3.5
Wyoming.....	90.4	38.1	10.0	41.0	1.2	76.3	40.6	35.7
Colorado.....	46.9	20.2	7.0	17.9	1.8	35.6	13.4	22.3
New Mexico.....	161.9	66.9	22.3	69.4	3.3	150.4	67.7	82.7
Arizona.....	60.8	15.0	10.4	32.7	2.7	42.6	20.3	22.3
Utah.....	54.3	24.3	7.1	22.1	.8	53.3	23.2	30.1
Nevada.....	14.9	2.8	5.4	6.3	.4	5.7	2.4	3.3
Pacific Division.....	558.9	279.5	84.7	184.8	9.8	268.9	181.1	87.8
Washington.....	7.6	3.3	.6	3.1	.6	4.1	1.1	3.0
Oregon.....	5.6	3.0	.2	1.8	.7	4.4	.8	3.6
California.....	342.6	163.0	35.6	136.1	7.9	225.9	149.8	76.1
Alaska.....	201.3	110.2	48.1	42.4	.6	33.9	29.3	4.6
Hawaii.....	1.8	-	.2	1.4	.1	.5	(Z)	.5

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both “gross” and “net” shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total “value of shipments and receipts” for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

“Value of shipments” used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

“Capital expenditures” used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



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SUBJECT SERIES

Size of Establishments

Issued June 1971



U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
James T. Lynn, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 5 subject reports. Additional separate reports will be issued for individual industries or groups of related industries and for each State. Other reports in this series cover a general summary, expenditures for plant and equipment, and type of operation.

These previously issued reports show figures for industries of States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used. In addition, the State reports contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The Introduction to the General Summary report of the 1967 Census of Mineral Industries discusses at greater length many of the subjects described briefly in this introduction. For example, the General Summary text discusses the economic significance of the mining sector; the relation of value added in mining to national income originating in mining; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST
New England
Middle Atlantic

SOUTH
South Atlantic
East South Central
West South Central

NORTH CENTRAL
East North Central
West North Central

WEST
Mountain
Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.



Contents

	page
TABLE 1 Number of Mineral Establishments Classified by Employment Size, by Industry Groups and Industries 1967 and 1963	3
2 Number of Mineral Establishments by Employment Size, by Geographic Area: 1967	5
3 General Statistics, by Employment Size of Establishment: 1967	6
APPENDIX Explanation of Terms	A1



TABLE 1. Number of Mineral Establishments Classified by Employment Size, by Industry Groups and Industries
1967 and 1963

Ind. Code	Industry Group and Industry	All establish- ments, total	Establishments with an average of —										Establish- ments covered by Admin- istrative records
			0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees or more	
	All mineral operations: 1967..... 1963.....	28,579	14,705	4,189	4,003	3,533	1,085	714	246	81	22	1	8,084
	INDUSTRIES, 1967												
10	Metal mining.....	1,155	578	141	118	101	54	88	41	22	11	1	333
1011	Iron ores.....	146	38	16	13	15	15	25	11	8	4	1	13
1021	Copper ores.....	156	66	19	9	15	5	14	15	9	4	-	33
1031	Lead and zinc ores.....	167	72	21	17	17	12	18	7	2	1	-	34
	Lead ores subindustry.....	104	60	14	8	6	6	6	1	2	1	-	28
	Zinc ores subindustry.....	63	12	7	9	11	6	12	6	-	-	-	6
104	Gold and silver ores.....	183	139	18	11	4	4	5	-	1	1	-	88
1042	Lode gold.....	77	60	7	4	-	2	3	-	-	1	-	40
1043	Placer gold.....	48	40	3	3	2	-	-	-	-	-	-	24
1044	Silver ores.....	58	39	8	4	2	2	2	-	1	-	-	24
1051	Bauxite and other aluminum ores....	17	4	3	3	5	-	1	1	-	-	-	1
106	Ferroalloy ores, except vanadium...	43	21	5	6	4	3	-	3	-	1	-	14
1062	Manganese ores.....	20	13	2	1	4	-	-	-	-	-	-	7
1064	Tungsten ores.....	23	8	3	5	-	3	-	3	-	1	-	7
1069	Ferroalloy ores, n.e.c.												
1081	Metal mining services.....	148	70	20	24	18	8	8	-	-	-	-	34
109	Miscellaneous metal ores.....	295	168	39	35	23	7	17	4	2	-	-	116
1092	Mercury ores.....	62	34	9	10	5	3	1	-	-	-	-	23
1093	Titanium ores.....	7	-	-	1	1	1	3	1	-	-	-	-
1094	Uranium-Radium-Vanadium ores.....	188	103	29	22	14	3	12	3	2	-	-	71
1099	Metallic ores, n.e.c.	38	31	1	2	3	-	1	-	-	-	-	22
11	Anthracite mining.....	403	206	75	53	39	18	10	1	-	1	-	137
1111	Anthracite.....	371	190	73	50	35	12	9	1	-	1	-	129
1112	Anthracite mining services.....	32	16	2	3	4	6	1	-	-	-	-	8
12	Bituminous coal and lignite mining.....	4,081	1,763	606	657	543	198	206	90	17	1	-	1,213
1211	Bituminous coal.....	3,921	1,673	582	636	526	191	206	89	17	1	-	1,142
1212	Lignite.....	45	26	7	5	5	2	-	-	-	-	-	24
1213	Bituminous and lignite mining services, n.e.c.	115	64	17	16	12	5	-	1	-	-	-	47
13	Oil and gas extraction.....	16,358	9,608	2,229	1,840	1,725	546	288	86	28	8	-	4,955
1311	Crude petroleum and natural gas....	8,796	5,901	1,163	698	587	210	146	63	20	8	-	2,601
	Crude petroleum subindustry.....	7,278	4,849	980	593	488	162	126	57	16	7	-	2,220
	Natural gas subindustry.....	1,518	1,052	183	105	99	48	20	6	4	1	-	381
1321	Natural gas liquids.....	684	152	136	180	178	31	6	1	-	-	-	7
138	Oil and gas field services.....	6,878	3,555	930	962	960	305	136	22	8	-	-	2,347
1381	Drilling oil and gas wells.....	2,347	1,117	307	342	363	142	63	10	3	-	-	748
1382	Oil and gas exploration services.....	636	409	58	70	54	24	21	-	-	-	-	269
1389	Oil and gas field services, n.e.c.	3,895	2,029	565	550	543	139	52	12	5	-	-	1,330
14	Nonmetallic minerals, except fuels.....	6,582	2,545	1,142	1,336	1,122	272	122	30	13	-	-	1,446
141	Dimension stone.....	244	139	51	33	15	5	1	-	-	-	-	85
	Dimension limestone subindustry..	46	20	14	6	4	1	1	-	-	-	-	11
	Dimension granite subindustry....	50	13	20	10	4	3	-	-	-	-	-	5
	Dimension stone subindustry, n.e.c.	148	106	17	17	7	1	-	-	-	-	-	69
142	Crushed and broken stone.....	2,033	460	286	573	543	125	40	6	-	-	-	231
1422	Crushed and broken limestone.....	1,484	324	202	448	394	86	25	5	-	-	-	184
1423	Crushed and broken granite.....	149	21	15	33	57	18	4	1	-	-	-	7
1429	Crushed and broken stone, n.e.c.	400	115	69	92	92	21	11	-	-	-	-	40

See footnotes at end of table.

TABLE 1. Number of Mineral Establishments Classified by Employment Size, by Industry Groups and Industries
1967 and 1963—Continued

Ind. Code	Industry Group and Industry	All establish- ments, total	Establishments with an average of -										Establish- ments covered by admin- istrative records
			0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees or more	
14	Nonmetallic minerals, except fuels—Continued												
144	Sand and gravel.....	3,232	1,511	650	586	398	63	21	3	-	-	-	896
1442	Construction sand and gravel.....	3,069	1,470	623	554	353	50	18	1	-	-	-	881
1446	Industrial sand.....	163	41	27	32	45	13	3	2	-	-	-	15
	Glass sand subindustry.....	41	5	4	5	18	6	2	1	-	-	-	1
	Molding sand subindustry.....	71	25	15	13	13	5	-	-	-	-	-	9
	Industrial sand, n.e.c. subindustry.....	51	11	8	14	14	2	1	1	-	-	-	5
145	Clay and related minerals.....	356	123	61	51	83	25	8	3	2	-	-	63
1452	Bentonite.....	32	4	2	10	12	3	1	-	-	-	-	2
1453	Fire clay.....	99	47	32	8	11	1	-	-	-	-	-	26
1454	Fuller's earth.....	16	2	1	2	5	4	1	1	-	-	-	1
1455	Kaolin and ball clay.....	63	14	8	7	17	10	3	2	2	-	-	3
1456	Feldspar.....	17	3	1	4	6	3	-	-	-	-	-	2
1459	Clay and related minerals, n.e.c.	129	53	17	20	32	4	3	-	-	-	-	29
147	Chemical and fertilizer minerals...	233	53	24	26	30	31	42	17	10	-	-	21
1472	Barite.....	30	10	5	5	4	3	3	-	-	-	-	6
1473	Fluorspar.....	32	15	4	4	5	2	2	-	-	-	-	5
1474	Potash, soda, and borate minerals.....	33	4	1	-	7	5	4	6	6	-	-	1
1475	Phosphate rock.....	69	9	7	12	5	11	16	6	3	-	-	3
1476	Rock salt.....	26	4	3	1	5	4	5	4	-	-	-	3
1477	Sulfur.....	31	6	1	3	3	5	11	1	1	-	-	1
1479	Chemical and fertilizer mining, n.e.c.	12	5	3	1	1	1	1	-	-	-	-	2
1481	Nonmetallic minerals services.....	106	64	21	11	7	3	-	-	-	-	-	37
149	Miscellaneous nonmetallic minerals.....	378	195	49	56	46	20	10	1	1	-	-	113
1492	Gypsum.....	33	14	9	5	3	2	-	-	-	-	-	9
1493	Mica.....	20	9	1	5	4	1	-	-	-	-	-	5
1494	Native asphalt and bitumens.....	12	2	-	3	4	2	1	-	-	-	-	2
1495	Pumice and pumicite.....	29	19	6	2	1	1	-	-	-	-	-	11
1496	Talc, soapstone, and pyrophy- lite.....	53	18	4	13	12	4	1	1	-	-	-	5
1497	Natural abrasives, except sand...	20	6	5	4	4	-	1	-	-	-	-	2
1498	Peat.....	76	50	9	13	3	1	-	-	-	-	-	27
1499	Nonmetallic minerals, n.e.c.	135	77	15	11	15	9	7	-	1	-	-	52

- Represents zero. n.e.c. Not elsewhere classified.

TABLE 2. Number of Mineral Establishments by Employment Size, by Geographic Area: 1967

Division and State	All establishments, total	Establishments with an average of —									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
United States, total	28,579	14,705	4,189	4,003	3,533	1,085	714	246	81	22	1
Northeast Region.....	2,944	1,480	431	455	339	123	81	27	6	2	-
New England Division.....	298	125	59	60	39	12	3	-	-	-	-
Maine.....	34	20	6	4	3	1	-	-	-	-	-
New Hampshire.....	26	10	8	5	3	-	-	-	-	-	-
Vermont.....	36	14	6	4	6	5	1	-	-	-	-
Massachusetts.....	111	44	23	25	15	3	1	-	-	-	-
Rhode Island.....	22	7	4	4	7	-	-	-	-	-	-
Connecticut.....	69	30	12	18	5	3	1	-	-	-	-
Middle Atlantic Division....	2,646	1,355	372	395	300	111	78	27	6	2	-
New York.....	467	216	86	78	52	13	15	6	1	-	-
New Jersey.....	138	47	21	25	30	12	3	-	-	-	-
Pennsylvania.....	2,041	1,092	265	292	218	86	60	21	5	2	-
North Central Region....	5,812	2,974	933	911	672	156	119	29	10	7	1
East North Central Division.	3,349	1,690	545	505	390	99	89	23	7	1	-
Ohio.....	1,195	637	195	166	134	33	22	8	-	-	-
Indiana.....	497	230	90	89	65	13	10	-	-	-	-
Illinois.....	962	464	128	156	130	35	37	7	5	-	-
Michigan.....	459	246	78	50	41	16	17	8	2	1	-
Wisconsin.....	236	113	54	44	20	2	3	-	-	-	-
West North Central Division.	2,463	1,284	388	406	282	57	30	6	3	6	1
Minnesota.....	226	93	33	35	31	9	17	3	2	2	1
Iowa.....	240	88	45	65	36	5	1	-	-	-	-
Missouri.....	381	175	65	65	52	13	6	1	1	3	-
North Dakota.....	166	98	23	21	18	4	1	-	-	-	-
South Dakota.....	81	55	6	13	5	1	-	-	-	1	-
Nebraska.....	254	155	35	40	24	-	-	-	-	-	-
Kansas.....	1,115	620	181	167	116	25	5	1	-	-	-
South Region.....	15,072	7,699	2,154	2,047	1,991	612	376	145	42	6	-
South Atlantic Division.....	3,259	1,573	476	448	434	148	112	57	11	-	-
Delaware.....	13	6	3	3	1	-	-	-	-	-	-
Maryland.....	136	50	30	25	26	4	1	-	-	-	-
Dist. of Col.	4	3	-	-	-	-	1	-	-	-	-
Virginia.....	737	269	150	148	123	28	14	4	1	-	-
West Virginia.....	1,780	1,050	201	188	161	60	69	45	6	-	-
North Carolina.....	161	48	21	33	44	12	2	1	-	-	-
South Carolina.....	59	13	8	12	14	10	2	-	-	-	-
Georgia.....	159	46	26	21	36	20	5	3	2	-	-
Florida.....	210	88	37	18	29	14	18	4	2	-	-
East South Central Division.	2,220	988	306	415	356	80	52	17	6	-	-
Kentucky.....	1,267	605	172	231	168	43	34	10	4	-	-
Tennessee.....	352	125	49	79	77	12	8	1	1	-	-
Alabama.....	294	116	38	56	59	12	6	6	1	-	-
Mississippi.....	307	142	47	49	52	13	4	-	-	-	-
West South Central Division.	9,593	5,138	1,372	1,184	1,201	384	212	71	25	6	-
Arkansas.....	306	162	43	45	42	8	4	2	-	-	-
Louisiana.....	1,382	572	190	193	225	99	68	22	10	3	-
Oklahoma.....	1,782	1,019	250	209	195	65	25	12	5	2	-
Texas.....	6,123	3,385	889	737	739	212	115	35	10	1	-
West Region.....	4,751	2,552	671	590	531	194	138	45	23	7	-
Mountain Division.....	2,830	1,581	385	328	299	102	82	30	19	4	-
Montana.....	311	202	39	32	21	9	5	2	-	1	-
Idaho.....	97	57	11	6	8	7	5	1	2	-	-
Wyoming.....	447	225	69	54	59	21	15	2	2	-	-
Colorado.....	648	382	82	89	59	16	13	6	-	1	-
New Mexico.....	690	364	89	81	94	30	19	7	6	-	-
Arizona.....	198	109	32	19	15	2	5	8	7	1	-
Utah.....	308	173	40	29	34	13	14	2	2	1	-
Nevada.....	131	69	23	18	9	4	6	2	-	-	-
Pacific Division.....	1,921	971	286	262	232	92	56	15	4	3	-
Washington.....	185	123	26	19	11	3	3	-	-	-	-
Oregon.....	160	89	25	28	14	4	-	-	-	-	-
California.....	1,438	689	221	199	181	78	48	15	4	3	-
Alaska.....	126	65	12	14	25	5	5	-	-	-	-
Hawaii.....	12	5	2	2	1	2	-	-	-	-	-

Standard Note: - Represents zero.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
	ALL MINERAL INDUSTRIES: Establishments, total.....	28,579	567.3	4,186.8	432.6	892.0	2,888.2	19,330.2	10,576.2	25,848.7	4,057.8
	Establishments with an average of-										
	0 to 4 employees.....	14,705	21.2	115.7	19.5	35.0	93.7	1,001.5	719.6	1,324.7	396.6
	5 to 9 employees.....	4,189	28.2	169.0	23.5	46.2	128.5	788.7	629.4	1,213.2	204.9
	10 to 19 employees.....	4,003	55.2	344.3	45.3	91.9	259.5	1,403.9	1,139.5	2,234.1	309.3
	20 to 49 employees.....	3,533	107.4	716.3	87.1	182.9	533.8	3,297.4	2,675.3	5,267.5	705.1
	50 to 99 employees.....	1,085	74.6	553.7	57.5	122.0	387.0	2,338.1	1,361.2	3,226.7	472.4
	100 to 249 employees.....	714	108.9	883.1	80.3	170.9	594.1	4,100.0	1,823.7	5,114.9	808.9
	250 to 499 employees.....	246	86.3	704.1	62.3	126.0	463.3	3,631.1	1,104.5	4,118.4	617.1
	500 to 999 employees.....	81	52.1	429.1	35.0	73.6	264.9	1,600.4	648.8	1,922.1	327.3
	1,000 to 2,499 employees.....	22	33.3	271.6	22.1	43.7	163.4	1,169.1	474.1	1,427.0	316.2
	2,500 employees or more.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	8,084	9.6	43.8	9.2	14.6	37.0	165.8	67.1	205.7	27.2
10	Metal mining: Establishments, total.....	1,155	70.9	552.4	55.4	113.9	396.1	1,556.6	1,079.4	2,296.2	339.8
	Establishments with an average of-										
	0 to 4 employees.....	578	.7	4.3	.7	1.2	3.4	28.7	12.5	36.7	4.5
	5 to 9 employees.....	141	.9	5.9	.7	1.4	4.2	15.4	9.5	20.3	4.5
	10 to 19 employees.....	118	1.8	11.0	1.3	2.5	7.7	15.6	23.1	26.0	12.8
	20 to 49 employees.....	101	3.1	22.3	2.2	4.5	14.3	42.6	50.5	70.1	23.1
	50 to 99 employees.....	54	3.8	29.9	2.7	5.4	17.6	83.0	86.2	136.0	33.3
	100 to 249 employees.....	88	12.9	99.4	9.7	19.4	65.4	245.6	233.8	427.1	52.2
	250 to 499 employees.....	41	14.3	118.5	11.0	23.3	82.0	376.0	228.3	503.8	100.4
	500 to 999 employees.....	22	14.4	114.1	11.9	25.2	89.5	325.4	217.1	482.3	60.2
	1,000 to 2,499 employees.....	11	19.4	147.0	15.4	31.1	112.3	424.3	218.4	593.9	48.8
	2,500 employees or more.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	335	.4	1.8	.3	.4	1.4	4.7	1.8	6.1	.5
1011	Iron ores: Establishments, total.....	146	22.6	185.9	18.0	36.2	133.4	661.9	400.3	953.4	108.8
	Establishments with an average of-										
	0 to 4 employees.....	38	.1	.5	(Z)	.1	.3	20.0	5.4	24.8	.7
	5 to 9 employees.....	16	.1	.7	.1	.2	.5	6.8	2.1	8.7	.2
	10 to 19 employees.....	13	.2	1.2	.1	.3	.8	3.3	.9	3.8	.6
	20 to 49 employees.....	15	.5	4.4	.2	.5	1.5	7.2	8.6	15.3	.5
	50 to 99 employees.....	15	1.1	8.5	.8	1.7	5.9	53.5	12.3	63.4	2.4
	100 to 249 employees.....	25	3.7	33.2	2.7	5.3	19.8	97.8	64.4	157.1	5.0
	250 to 499 employees.....	11	3.9	35.3	3.2	6.8	26.1	132.1	82.2	161.8	52.4
	500 to 999 employees.....	8	5.3	40.1	4.6	9.4	33.2	105.3	75.2	153.2	27.2
	1,000 to 2,499 employees.....	4	7.8	62.1	6.2	12.1	45.4	235.9	149.3	365.4	19.9
	2,500 employees or more.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	13	(Z)	.1	(Z)	(Z)	.1	.4	.1	.4	(Z)
1021	Copper ores: Establishments, total.....	156	20.9	170.9	15.0	32.5	114.6	436.5	361.6	675.9	122.1
	Establishments with an average of-										
	0 to 4 employees.....	66	.1	.6	.1	.1	.4	.8	2.8	1.2	2.5
	5 to 9 employees.....	19	.2	1.8	.2	.3	.7	-5.5	4.5	1.2	2.8
	10 to 19 employees.....	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	15	.9	7.6	.5	1.2	3.6	10.9	39.2	29.0	21.1
	50 to 99 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	14	2.1	16.2	1.1	2.2	7.4	-3.9	73.3	57.5	11.9
	250 to 499 employees.....	15	5.4	47.0	3.6	7.9	26.9	159.8	79.4	210.1	29.1
	500 to 999 employees.....	9	6.0	50.4	4.7	10.7	37.2	163.5	105.1	241.2	27.4
	1,000 to 2,499 employees.....	4	6.2	47.1	4.9	10.2	38.4	105.7	57.3	135.8	27.3
	Estabs. covered by admin. records.....	33	(Z)	.2	(Z)	(Z)	.2	.5	.3	.8	.1
1031	Lead and zinc ores: Establishments, total.....	167	9.1	60.9	7.5	15.0	46.2	102.6	92.3	151.2	43.8
	Establishments with an average of-										
	0 to 4 employees.....	72	.1	.5	.1	.1	.3	.7	.4	.8	.2
	5 to 9 employees.....	21	.2	.9	.1	.2	.6	1.7	.6	2.0	.4
	10 to 19 employees.....	17	.8	5.9	.6	1.4	4.2	10.2	26.9	13.7	23.4
	20 to 49 employees.....	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	12	.8	6.3	.5	.9	2.6	-2.4	29.1	16.2	10.5
	100 to 249 employees.....	18	5.0	31.9	4.3	8.6	26.2	68.7	26.7	86.9	8.6
	250 to 499 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	2	2.3	15.4	1.9	3.7	12.3	23.7	8.8	31.6	.9
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	34	.1	.1	.1	.1	.1	.2	.1	.3	(Z)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
		(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
10	Metal mining--Continued										
1032	Lead ores subindustry:										
	Establishments, total.....	104	4.2	30.6	3.3	6.7	21.9	36.9	62.9	65.5	34.2
	Establishments with an average of-										
	0 to 4 employees.....	60	.1	.3	.1	.1	.3	.5	.2	.6	.1
	5 to 9 employees.....	14	.1	.5	.1	.1	.3	.8	.3	.9	.3
	10 to 19 employees.....	8	.7	6.4	.4	.9	2.4	-4.0	44.8	10.7	30.1
	20 to 49 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	6	1.1	7.9	.9	1.9	6.6	15.7	8.8	21.7	2.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	2	2.3	15.4	1.9	3.7	12.3	23.7	8.8	31.6	.9
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	28	(Z)	.1	(Z)	(Z)	.1	.2	.1	.2	(Z)
1033	Zinc ores subindustry:										
	Establishments, total.....	63	4.9	30.3	4.1	8.3	24.3	65.4	29.4	85.6	9.5
	Establishments with an average of-										
	0 to 4 employees.....	12	(Z)	.2	(Z)	(Z)	.1	.2	.2	.3	.1
	5 to 9 employees.....	7	.1	.3	.1	.1	.3	.9	.3	1.1	.1
	10 to 19 employees.....	9	.1	1.0	.1	.3	.8	2.5	6.3	4.0	2.8
	20 to 49 employees.....	11	.4	2.4	.3	.6	1.8	5.2	(D)	7.2	(D)
	50 to 99 employees.....	6	.4	2.4	.3	.5	1.7	4.0	4.9	8.0	1.0
	100 to 249 employees.....	12	1.8	10.9	1.6	3.0	8.5	25.9	9.7	32.5	3.1
	250 to 499 employees.....	6	2.1	13.1	1.8	3.7	11.1	27.1	8.2	32.7	2.6
	Estabs. covered by admin. records.....	6	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)
1042	Lode gold:										
	Establishments, total.....	77	2.4	16.2	2.0	4.6	12.9	33.3	10.5	42.3	1.5
	Establishments with an average of-										
	0 to 4 employees.....	60	.1	.3	.1	.1	.2	.2	.3	.3	.3
	5 to 9 employees.....	7	(Z)	.2	(Z)	.1	.2	.1	(D)	.1	(D)
	10 to 19 employees.....	4	.2	1.6	.2	.3	.8	1.2	.4	1.6	.1
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	3	2.1	14.0	1.8	4.2	11.6	31.8	9.7	40.4	1.1
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	40	(Z)	.2	(Z)	.1	.1	.1	.1	.2	(Z)
1043	Placer gold:										
	Establishments, total.....	48	.2	1.1	.2	.4	.9	2.1	.7	2.5	.3
	Establishments with an average of-										
	0 to 4 employees.....	40	.1	.2	(Z)	.1	.2	.6	.3	.8	.1
	5 to 9 employees.....	3	.1	.8	.1	.3	.7	1.5	.4	1.8	.2
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	24	(Z)	.1	(Z)	(Z)	.1	.3	.1	.3	(Z)
1044	Silver ores:										
	Establishments, total.....	58	1.2	8.2	1.0	1.9	6.4	16.0	5.1	18.5	2.6
	Establishments with an average of-										
	0 to 4 employees.....	39	(Z)	.3	(Z)	.1	.2	.3	.2	.4	.1
	5 to 9 employees.....	8	(Z)	.2	(Z)	.1	.1	.2	.2	.2	.1
	10 to 19 employees.....	4	.2	2.0	.2	.4	1.0	1.9	.8	1.5	1.2
	20 to 49 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	2	.8	5.7	.7	1.4	5.0	13.4	3.9	16.3	1.0
	500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	24	(Z)	.1	(Z)	(Z)	.1	.1	(Z)	.2	(Z)
1051	Bauxite and other aluminum ores:										
	Establishments, total.....	17	.6	4.1	.5	.8	2.9	22.5	6.7	28.8	.4
	Establishments with an average of-										
	0 to 4 employees.....	4	.6	4.1	.5	.8	2.9	22.5	6.7	28.8	.4
	5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967										
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures	
			Number	Payroll	Number	Man-hours	Wages					
												(number)
10	Metal mining--Continued											
1062	Manganese ores:											
	Establishments, total.....	20	.2	.8	.1	.2	.6	1.8	2.5	4.0	0.2	
	Establishments with an average of-											
	0 to 4 employees.....	13	(Z)	.1	(Z)	(Z)	(Z)	.2	.2	.3	(Z)	
	5 to 9 employees.....	2	.1	.7	.1	.2	.6	1.6	2.3	3.7	.2	
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	20 to 49 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	Estabs. covered by admin. records.....	7	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)	
1064	Tungsten ores and ferroalloy ores, n.e.c.:											
1069		Establishments, total.....	23	3.8	31.1	3.0	6.0	22.4	71.7	45.0	104.3	12.4
		Establishments with an average of-										
		0 to 4 employees.....	8	(Z)	.1	(Z)	(Z)	.1	.1	1.5	.2	1.6
		5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
		10 to 19 employees.....	5	.3	2.5	.2	.4	1.3	7.5	1.7	8.9	.3
		50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
		250 to 499 employees.....	3	3.5	28.3	2.8	5.6	20.9	63.9	41.7	95.2	10.4
		1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
		Estabs. covered by admin. records.....	7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)
1081	Metal mining services:											
	Establishments, total.....	148	2.6	19.1	2.4	4.5	16.3	33.6	17.2	48.3	2.3	
	Establishments with an average of-											
	0 to 4 employees.....	70	.1	.6	.1	.2	.6	1.5	1.2	2.4	.2	
	5 to 9 employees.....	20	.1	.7	.1	.2	.6	1.2	.7	1.7	.2	
	10 to 19 employees.....	24	.3	2.2	.3	.6	2.1	4.4	2.1	6.0	.4	
	20 to 49 employees.....	18	.5	3.0	.4	.8	2.9	6.6	2.7	8.7	.5	
	50 to 99 employees.....	8	.5	3.6	.5	.9	3.4	6.5	3.8	9.9	.3	
	100 to 249 employees.....	8	1.1	9.0	1.0	1.8	6.9	13.5	6.8	19.5	.7	
	Estabs. covered by admin. records.....	34	(Z)	.2	(Z)	.1	.2	.8	.3	1.0	.1	
1092	Mercury ores:											
	Establishments, total.....	62	.7	4.7	.6	1.2	3.8	8.3	(D)	10.6	(D)	
	Establishments with an average of-											
	0 to 4 employees.....	34	(Z)	.2	(Z)	.1	.2	.2	(D)	.3	(D)	
	5 to 9 employees.....	9	.1	.4	.1	.1	.4	.4	(D)	.8	(D)	
	10 to 19 employees.....	10	.2	1.7	.2	.5	1.4	3.6	(D)	4.4	(D)	
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	50 to 99 employees.....	3	.3	2.4	.3	.6	1.8	4.0	(D)	5.0	(D)	
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	Estabs. covered by admin. records.....	23	(Z)	.1	(Z)	.1	.1	.2	(D)	.3	(D)	
1093	Titanium ores:											
	Establishments, total.....	7	.9	6.4	.7	1.4	4.9	17.3	7.5	23.5	1.3	
	Establishments with an average of-											
	10 to 19 employees.....	1	.9	6.4	.7	1.4	4.9	17.3	7.5	23.5	1.3	
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	100 to 249 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
1094	Uranium-Radium-Vanadium ores:											
	Establishments, total.....	188	5.4	40.5	4.1	8.5	28.9	142.1	116.6	218.2	40.5	
	Establishments with an average of-											
	0 to 4 employees.....	103	.1	.7	.1	.2	.6	3.3	1.4	4.3	.3	
	5 to 9 employees.....	29	.2	1.4	.1	.3	.9	3.1	2.0	4.0	1.1	
	10 to 19 employees.....	22	.3	2.1	.2	.4	1.2	2.1	3.5	3.6	2.1	
	20 to 49 employees.....	14	.4	2.6	.3	.5	1.7	8.6	4.5	12.8	.3	
	50 to 99 employees.....	3	.2	1.2	.2	.3	.9	5.2	6.4	9.8	1.8	
	100 to 249 employees.....	12	1.8	12.8	1.3	2.9	8.8	49.8	60.1	85.4	24.4	
	250 to 499 employees.....	3	2.4	19.7	1.9	3.9	14.7	70.0	38.8	98.2	10.4	
	500 to 999 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	Estabs. covered by admin. records.....	71	.1	.4	.1	.1	.3	1.5	.7	2.0	.2	
1099	Metallic ores, n.e.c.:											
	Establishments, total.....	38	.3	2.4	.3	.6	2.0	7.1	(D)	14.8	(D)	
	Establishments with an average of-											
	0 to 4 employees.....	31	(Z)	.2	(Z)	.1	.2	.6	(D)	.6	(D)	
	5 to 9 employees.....	1	(Z)	.2	(Z)	(Z)	.1	.4	(D)	.8	(D)	
	10 to 19 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	20 to 49 employees.....	3	.3	2.1	.3	.6	1.7	6.1	(D)	13.4	(D)	
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	Estabs. covered by admin. records.....	22	(Z)	(Z)	.1	.4	.1	(Z)	.1	.4	(Z)	

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
11	Anthracite mining: Establishments, total.....	403	7.2	41.1	6.3	11.6	35.0	82.1	80.2	155.9	6.4
	Establishments with an average of-										
	0 to 4 employees.....	206	.3	1.7	.3	.6	1.7	5.8	4.8	9.9	.8
	5 to 9 employees.....	75	.5	2.4	.5	.8	2.2	4.9	7.3	11.4	.7
	10 to 19 employees.....	53	.7	3.9	.6	1.2	3.5	9.4	8.4	17.0	.9
	20 to 49 employees.....	39	1.3	7.6	1.1	2.1	6.4	18.5	23.1	38.5	2.0
	50 to 99 employees.....	18	1.2	6.7	.9	1.8	5.2	10.3	19.7	28.7	1.3
	100 to 249 employees.....	10	3.1	18.9	2.6	5.1	16.1	33.8	17.6	50.4	.7
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	137	.2	.9	.2	.4	.8	2.9	2.8	5.2	.5
1111	Anthracite: Establishments, total.....	371	6.4	36.6	5.5	10.3	30.9	74.7	76.4	146.0	5.0
	Establishments with an average of-										
	0 to 4 employees.....	190	.3	1.5	.3	.6	1.5	5.5	4.6	9.3	.7
	5 to 9 employees.....	73	.5	2.2	.4	.8	2.0	4.7	7.1	11.1	.7
	10 to 19 employees.....	50	.6	3.4	.6	1.1	3.1	8.6	7.8	15.8	.7
	20 to 49 employees.....	35	1.1	6.3	1.0	1.8	5.4	16.0	22.4	36.5	1.8
	50 to 99 employees.....	12	.8	4.9	.6	1.1	3.5	7.2	17.4	24.1	.4
	100 to 249 employees.....	9	3.0	18.2	2.5	4.9	15.4	32.8	17.1	49.2	.6
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	129	.2	.7	.2	.3	.7	2.5	2.5	4.5	.4
1112	Anthracite mining services: Establishments, total.....	32	.8	4.5	.7	1.3	4.1	7.4	3.9	9.9	1.4
	Establishments with an average of-										
	0 to 4 employees.....	16	(Z)	.1	(Z)	.1	.1	.2	.2	.4	(Z)
	5 to 9 employees.....	2	(Z)	.1	(Z)	.1	.2	.1	.1	.1	.1
	10 to 19 employees.....	3	.1	.3	.1	.1	.3	.7	.2	.8	.1
	20 to 49 employees.....	4	.2	.9	.2	.2	.8	1.5	.7	2.0	.2
	50 to 99 employees.....	6	.5	3.0	.4	.9	2.8	4.9	2.8	6.5	1.1
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	8	(Z)	.1	(Z)	(Z)	(Z)	.1	.1	.2	(Z)
12	Bituminous coal and lignite mining: Establishments, total.....	4,081	124.4	926.2	108.9	212.4	776.8	2,009.2	1,269.7	2,944.7	334.3
	Establishments with an average of-										
	0 to 4 employees.....	1,763	2.6	12.3	2.5	3.9	10.8	38.1	41.3	67.0	12.4
	5 to 9 employees.....	606	4.1	19.8	3.8	6.4	17.1	45.2	58.5	87.9	15.9
	10 to 19 employees.....	657	8.9	48.1	8.1	14.5	40.6	109.1	86.3	174.0	20.9
	20 to 49 employees.....	543	16.3	101.1	14.3	27.3	84.1	218.1	193.4	365.1	47.1
	50 to 99 employees.....	198	14.1	109.6	12.1	24.3	89.2	253.4	186.6	371.7	68.6
	100 to 249 employees.....	206	33.8	276.9	29.4	59.6	232.7	626.3	396.8	915.7	107.5
	250 to 499 employees.....	90	32.0	255.5	28.1	54.7	215.9	521.5	217.5	689.5	49.4
	500 to 999 employees.....	17	12.8	102.9	10.6	21.7	86.4	197.4	89.1	273.8	12.8
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	1,213	1.7	7.6	1.7	2.5	7.1	22.8	11.4	31.3	2.9
1211	Bituminous coal: Establishments, total.....	3,921	122.5	912.5	107.2	208.8	764.7	1,974.6	1,252.4	2,897.5	329.5
	Establishments with an average of-										
	0 to 4 employees.....	1,673	2.5	11.7	2.4	3.7	10.3	36.4	40.0	64.4	12.0
	5 to 9 employees.....	582	4.0	18.7	3.7	6.1	16.2	43.2	57.3	84.9	15.5
	10 to 19 employees.....	636	8.6	46.2	7.9	14.0	38.9	104.4	83.8	168.1	20.5
	20 to 49 employees.....	526	15.8	97.2	13.9	26.3	80.8	207.6	186.9	351.3	44.9
	50 to 99 employees.....	191	13.6	106.1	11.6	23.5	86.1	241.8	183.8	356.6	67.1
	100 to 249 employees.....	206	33.8	276.9	29.4	59.6	232.7	626.3	396.8	915.7	107.4
	250 to 499 employees.....	89	31.6	252.7	27.8	54.0	213.2	517.4	214.7	682.6	49.4
	500 to 999 employees.....	17	12.8	102.9	10.6	21.7	86.4	197.4	89.1	274.0	12.8
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records....	1,142	1.3	5.7	1.3	1.9	5.3	18.2	9.0	24.9	2.3

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
12	Bituminous coal and lignite mining-- Continued										
1212	Lignite industry: Establishments, total.....	45	.5	3.3	.4	.8	2.6	12.9	6.5	17.9	1.5
	Establishments with an average of-										
	0 to 4 employees.....	26	(Z)	.1	(Z)	.1	.1	.3	.3	.5	-
	5 to 9 employees.....	7	.1	.3	(Z)	.1	.3	.5	.6	.9	.2
	10 to 19 employees.....	5	(Z)	.4	(Z)	.1	.3	1.5	.5	1.9	(Z)
	20 to 49 employees.....	5	.4	2.4	.3	.6	1.9	10.6	5.2	14.6	1.2
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	24	(Z)	.1	(Z)	(Z)	.1	.2	.2	.4	(Z)
1213	Bituminous and lignite mining services, n.e.c.: Establishments, total.....	115	1.4	10.4	1.3	2.8	9.6	21.7	10.8	29.3	3.3
	Establishments with an average of-										
	0 to 4 employees.....	64	.1	.4	.1	.1	.4	1.4	.9	2.0	.4
	5 to 9 employees.....	17	.1	.8	.1	.2	.6	1.5	.7	2.1	.2
	10 to 19 employees.....	16	.2	1.5	.2	.5	1.4	3.2	1.8	4.4	.6
	20 to 49 employees.....	12	.4	2.7	.3	.7	2.4	7.0	2.2	8.1	1.3
	50 to 99 employees.....	5	.6	5.1	.6	1.3	4.9	8.5	5.1	12.7	.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	47	.1	.3	.1	.1	.3	.9	.6	1.4	.1
13	Oil and gas extraction: Establishments, total.....	16,358	244.9	1,855.1	167.2	346.5	1,091.4	13,394.3	7,066.2	17,455.9	3,004.6
	Establishments with an average of-										
	0 to 4 employees.....	9,608	13.4	74.4	12.0	21.9	57.8	846.4	616.9	1,101.3	362.1
	5 to 9 employees.....	2,229	14.9	92.4	11.9	23.9	66.5	598.4	487.7	928.8	157.4
	10 to 19 employees.....	1,840	25.3	161.9	20.1	40.7	116.1	974.6	873.1	1,625.7	222.1
	20 to 49 employees.....	1,725	53.2	367.0	41.8	87.5	264.6	2,470.9	2,119.1	4,064.0	525.9
	50 to 99 employees.....	546	37.1	285.2	27.4	58.0	187.3	1,690.8	911.4	2,275.7	326.5
	100 to 249 employees.....	288	42.6	361.7	25.9	58.0	193.5	2,750.1	974.3	3,133.3	591.2
	250 to 499 employees.....	86	29.4	254.3	15.5	31.3	113.4	2,484.0	589.5	2,645.7	427.8
	500 to 999 employees.....	28	29.1	258.2	12.6	25.4	93.0	1,579.1	494.2	1,681.4	391.6
	1,000 to 2,499 employees.....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	4,955	7.3	34.7	7.2	11.7	28.8	125.9	43.3	147.4	21.8
1311	Crude petroleum and natural gas: Establishments, total.....	8,796	126.4	1,049.1	66.2	130.0	440.3	10,965.0	3,308.3	11,731.7	2,541.6
	Establishments with an average of-										
	0 to 4 employees.....	5,901	7.4	40.1	6.3	10.4	27.8	705.9	415.3	804.0	317.1
	5 to 9 employees.....	1,163	7.7	46.9	5.4	10.4	28.4	459.8	188.4	523.9	124.3
	10 to 19 employees.....	698	9.5	64.1	6.2	12.2	34.1	614.8	211.0	686.2	139.7
	20 to 49 employees.....	587	18.1	135.8	11.3	22.6	71.0	1,634.0	462.8	1,684.5	412.3
	50 to 99 employees.....	210	14.8	129.1	8.3	16.6	60.9	1,289.5	355.9	1,393.5	251.9
	100 to 249 employees.....	146	22.4	208.1	9.9	20.5	75.3	2,387.8	700.3	2,562.2	525.9
	250 to 499 employees.....	63	21.7	196.7	9.9	19.9	74.2	2,377.5	536.4	2,502.4	411.4
	500 to 999 employees.....	20	24.7	228.0	8.8	17.2	68.7	1,495.9	437.9	1,575.0	359.0
	1,000 to 2,499 employees.....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	2,601	2.8	11.7	2.8	3.3	8.8	58.5	20.2	64.0	14.6
	Crude petroleum subindustry: Establishments, total.....	7,278	106.8	901.7	54.9	107.7	365.6	8,943.0	2,771.8	9,648.7	2,066.1
	Establishments with an average of-										
	0 to 4 employees.....	4,849	6.2	33.0	5.3	8.6	23.0	526.3	320.7	601.4	245.6
	5 to 9 employees.....	980	6.5	38.9	4.6	8.8	23.4	326.9	149.9	381.7	95.1
	10 to 19 employees.....	593	8.1	54.2	5.4	10.4	28.9	458.6	174.7	517.6	115.7
	20 to 49 employees.....	488	14.9	110.3	9.2	18.3	55.9	1,149.4	338.5	1,211.1	276.8
	50 to 99 employees.....	162	11.4	102.4	6.3	12.8	47.1	855.4	262.2	955.0	162.7
	100 to 249 employees.....	126	19.2	182.9	8.1	16.9	62.7	2,078.4	609.7	2,237.1	451.0
	250 to 499 employees.....	57	19.9	182.3	8.6	17.4	65.0	2,134.8	494.1	2,251.7	377.2
	500 to 999 employees.....	16	20.5	197.7	7.4	14.5	59.8	1,413.2	422.0	1,493.3	341.9
	1,000 to 2,499 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	2,220	2.4	10.2	2.4	2.9	7.7	52.7	19.2	58.0	13.8

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
13	Oil and gas extraction--Continued										
1311	Crude petroleum and natural gas--Continued										
	Natural gas subindustry:										
	Establishments, total.....	1,518	19.6	147.4	11.2	22.3	74.7	2,022.1	536.5	2,082.9	475.6
	Establishments with an average of-										
	0 to 4 employees.....	1,052	1.2	7.0	1.0	1.8	4.8	179.5	94.6	202.7	71.5
	5 to 9 employees.....	183	1.2	8.0	.8	1.7	4.9	132.8	38.5	142.2	29.2
	10 to 19 employees.....	105	1.4	9.9	.8	1.8	5.1	156.3	36.3	168.6	24.0
	20 to 49 employees.....	99	3.2	25.5	2.1	4.3	15.1	484.7	124.6	473.6	135.7
	50 to 99 employees.....	48	3.4	26.6	2.0	3.9	13.8	434.0	93.7	438.6	89.2
	100 to 249 employees.....	20	3.3	25.2	1.8	3.6	12.6	309.4	90.5	325.0	74.9
	250 to 499 employees.....	6	1.8	14.4	1.2	2.5	9.3	242.7	42.3	250.7	34.2
	500 to 999 employees.....	4	4.1	30.8	1.4	2.7	8.9	82.7	15.9	81.7	17.1
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	381	.4	1.5	.4	.4	1.1	5.8	1.0	6.0	.8
1321	Natural gas liquids:										
	Establishments, total.....	684	12.4	99.5	10.5	21.0	82.1	905.0	3,016.9	3,707.6	214.4
	Establishments with an average of-										
	0 to 4 employees.....	152	.3	2.5	.3	.6	2.2	38.2	153.7	166.8	25.4
	5 to 9 employees.....	136	.9	7.4	.8	1.7	6.6	55.6	264.8	297.6	22.8
	10 to 19 employees.....	180	2.5	20.0	2.2	4.5	17.3	188.3	585.9	716.3	57.7
	20 to 49 employees.....	178	5.6	44.3	4.9	9.5	38.0	447.1	1,482.1	1,874.1	55.1
	50 to 99 employees.....	31	2.0	16.5	1.6	3.3	12.3	110.9	530.5	496.3	53.3
	100 to 249 employees.....	6	1.2	8.8	.8	1.5	5.8	64.9	(D)	156.7	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	7	(Z)	(Z)	(Z)	(Z)	(Z)	.1	.3	.4	-
1381	Drilling oil and gas wells:										
	Establishments, total.....	2,347	42.9	294.7	38.7	81.4	255.2	627.4	406.7	893.7	140.4
	Establishments with an average of-										
	0 to 4 employees.....	1,117	1.7	10.0	1.6	3.1	8.7	29.3	25.1	43.0	11.4
	5 to 9 employees.....	307	2.1	12.9	1.9	3.8	10.9	26.8	14.6	37.1	4.3
	10 to 19 employees.....	342	4.8	29.3	4.4	8.6	25.5	62.7	36.2	88.0	10.9
	20 to 49 employees.....	363	11.4	75.8	10.2	22.0	66.5	151.9	96.2	217.0	31.1
	50 to 99 employees.....	142	9.6	67.9	8.7	18.7	58.8	137.7	89.7	200.2	27.2
	100 to 249 employees.....	63	8.6	70.1	7.2	16.8	57.7	142.9	88.9	208.1	23.7
	250 to 499 employees.....	10	3.3	20.4	3.1	5.6	18.8	47.7	27.2	63.3	11.5
	500 to 999 employees.....	3	1.6	8.3	1.6	2.8	8.3	28.4	28.8	37.0	20.2
	Estabs. covered by admin. records.....	748	.9	4.7	.9	1.6	4.2	13.7	7.6	19.0	2.2
1382	Oil and gas exploration services:										
	Establishments, total.....	636	8.4	53.1	6.6	15.9	39.4	126.4	45.5	152.0	20.0
	Establishments with an average of-										
	0 to 4 employees.....	409	.6	3.1	.6	1.1	2.9	12.0	3.9	14.5	1.3
	5 to 9 employees.....	58	.4	2.5	.3	.8	2.1	5.6	1.8	6.8	.6
	10 to 19 employees.....	70	1.0	6.1	.8	2.0	5.4	18.5	6.2	21.4	3.3
	20 to 49 employees.....	54	1.8	11.3	1.4	3.3	9.0	27.6	8.8	32.4	4.0
	50 to 99 employees.....	24	1.6	10.6	1.2	3.0	7.4	25.2	7.8	29.5	3.6
	100 to 249 employees.....	21	3.1	19.4	2.2	5.9	12.6	37.4	17.0	47.3	7.1
	Estabs. covered by admin. records.....	269	.3	1.5	.3	.5	1.4	7.2	2.4	8.7	.8
1389	Oil and gas field services, n.e.c.:										
	Establishments, total.....	3,895	54.8	358.7	45.3	98.2	274.4	770.4	288.8	971.0	88.2
	Establishments with an average of-										
	0 to 4 employees.....	2,029	3.4	18.5	3.2	6.7	16.0	62.4	17.8	73.6	6.7
	5 to 9 employees.....	565	3.8	22.7	3.4	7.1	18.5	50.7	18.2	63.4	5.4
	10 to 19 employees.....	550	7.5	42.2	6.5	13.5	33.8	94.6	30.1	114.1	10.6
	20 to 49 employees.....	543	16.3	99.5	14.0	30.0	79.8	214.4	67.1	258.1	23.4
	50 to 99 employees.....	139	9.1	61.1	7.6	16.4	47.9	127.5	42.3	156.2	13.5
	100 to 249 employees.....	52	7.6	58.2	5.8	13.3	42.1	117.2	53.3	159.0	11.5
	250 to 499 employees.....	12	7.1	56.7	4.8	11.2	36.3	103.7	59.9	146.6	17.1
	500 to 999 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	1,330	1.8	8.4	1.8	3.3	7.1	29.6	8.1	35.2	2.4

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
			(number)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
14	Nonmetallic minerals, except fuels:										
	Establishments, total.....	6,582	119.8	812.0	94.8	207.5	588.9	2,288.0	1,080.7	2,996.0	372.7
	Establishments with an average of-										
	0 to 4 employees.....	2,545	4.2	23.1	4.0	7.4	20.1	82.6	44.1	109.9	16.8
	5 to 9 employees.....	1,142	7.8	48.6	6.6	13.7	38.5	124.9	66.5	165.0	26.4
	10 to 19 employees.....	1,336	18.6	119.5	15.2	33.0	91.8	295.4	149.0	391.8	52.8
	20 to 49 employees.....	1,122	33.6	218.9	27.6	61.6	164.7	545.2	291.4	729.1	106.9
	50 to 99 employees.....	272	18.5	122.0	14.4	32.4	87.5	296.7	159.0	413.3	42.4
	100 to 249 employees.....	122	18.1	134.7	14.0	31.3	94.7	456.1	208.2	607.0	57.3
	250 to 499 employees.....	30	10.3	73.3	7.4	16.1	50.0	228.7	86.1	274.4	40.4
	500 to 999 employees.....	13	8.7	71.9	5.6	12.0	41.9	259.1	76.0	305.6	29.5
	Establs. covered by admin. records.....	1,446	1.8	8.8	1.5	3.1	7.7	30.0	14.5	40.8	3.7
1411	Dimension stone:										
	Establishments, total.....	244	1.9	9.3	1.8	3.3	7.6	18.1	5.2	22.1	1.1
	Establishments with an average of-										
	0 to 4 employees.....	139	.2	.9	.2	.4	.8	2.7	.8	3.2	.3
	5 to 9 employees.....	51	.4	1.6	.3	.6	1.3	3.0	1.0	3.7	.3
	10 to 19 employees.....	33	.4	2.1	.4	.7	1.5	3.5	1.1	4.4	.3
	20 to 49 employees.....	15	.5	2.3	.4	.8	1.9	3.4	1.1	4.4	.1
	50 to 99 employees.....	5	.5	2.6	.4	.8	2.1	5.4	1.1	6.4	.2
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	85	.1	.4	.1	.2	.4	1.7	.5	2.0	.2
	Dimension limestone subindustry:										
	Establishments, total.....	46	.5	2.7	.5	.9	2.2	5.4	1.5	6.5	.4
	Establishments with an average of-										
	0 to 4 employees.....	20	(Z)	.1	(Z)	.1	.1	.3	.1	.4	(Z)
	5 to 9 employees.....	14	.1	.4	.1	.2	.3	.8	.4	1.0	.1
	10 to 19 employees.....	6	.1	.4	.1	.1	.3	1.0	.3	1.2	.1
	20 to 49 employees.....	4	.3	1.8	.3	.6	1.5	3.3	.7	3.9	.1
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	11	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)
	Dimension granite subindustry:										
	Establishments, total.....	50	.6	3.6	.6	1.2	2.9	6.8	2.1	8.7	.2
	Establishments with an average of-										
	0 to 4 employees.....	13	(Z)	.1	(Z)	.1	.1	.3	.2	.5	(Z)
	5 to 9 employees.....	20	.1	.6	.1	.3	.6	1.3	.4	1.6	.1
	10 to 19 employees.....	10	.1	.9	.1	.2	.5	1.0	.5	1.5	(Z)
	20 to 49 employees.....	4	.3	2.1	.3	.6	1.7	4.0	1.0	5.0	.1
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	5	(Z)	.1	(Z)	(Z)	.1	.2	.1	.3	(Z)
	Dimension stone, n.e.c. subindustry:										
	Establishments, total.....	148	.8	3.0	.7	1.3	2.6	5.9	1.5	7.0	.4
	Establishments with an average of-										
	0 to 4 employees.....	106	.2	.7	.2	.3	.6	2.1	.5	2.4	.2
	5 to 9 employees.....	17	.1	.6	.1	.2	.4	.9	.2	1.1	.1
	10 to 19 employees.....	17	.2	.8	.2	.3	.7	1.5	.3	1.7	.1
	20 to 49 employees.....	7	.3	1.0	.3	.5	.9	1.4	.5	1.8	(Z)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	69	.1	.3	.1	.1	.3	1.3	.3	1.5	.1
1422	Crushed and broken limestone:										
	Establishments, total.....	1,484	30.8	197.5	25.8	58.5	153.6	492.2	253.1	666.6	78.7
	Establishments with an average of-										
	0 to 4 employees.....	324	.5	3.2	.5	1.0	2.7	11.3	5.9	15.5	1.7
	5 to 9 employees.....	202	1.4	8.3	1.2	2.6	6.5	23.8	14.8	34.1	4.5
	10 to 19 employees.....	448	6.4	39.2	5.5	12.3	31.6	106.1	51.0	139.5	17.7
	20 to 49 employees.....	394	11.5	72.7	9.7	22.2	56.5	173.7	93.5	237.9	29.3
	50 to 99 employees.....	86	5.7	37.3	4.7	10.7	28.0	87.6	40.4	117.2	10.8
	100 to 249 employees.....	25	3.6	25.5	3.1	7.2	20.3	64.0	33.5	87.0	10.6
	250 to 499 employees.....	5	1.7	11.3	1.2	2.6	8.0	25.7	13.9	35.4	4.2
	Establs. covered by admin. records.....	184	.2	1.2	.2	.4	1.1	4.4	2.5	6.4	.5

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967--Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
		(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
14	Nonmetallic minerals, except fuels--Con.										
1423	Crushed and broken granite: Establishments, total.....	149	4.5	27.1	3.9	8.9	22.0	80.1	47.1	114.2	13.0
	Establishments with an average of-										
	0 to 4 employees.....	21	(2)	.1	(2)	(2)	.1	.7	.3	1.0	(2)
	5 to 9 employees.....	15	.1	.7	.1	.2	.6	1.5	.7	2.0	.3
	10 to 19 employees.....	33	.5	3.3	.4	.9	2.2	7.9	4.0	10.4	1.4
	20 to 49 employees.....	57	1.8	10.1	1.6	3.7	8.5	34.0	19.2	46.7	6.5
	50 to 99 employees.....	18	1.2	7.3	1.1	2.6	6.2	19.9	12.7	28.8	3.9
	100 to 249 employees.....	4	.8	5.7	.7	1.5	4.6	16.0	10.1	25.3	.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	7	(2)	(2)	(2)	(2)	(2)	.1	(2)	.2	(2)
1429	Crushed and broken stone, n.e.c.: Establishments, total.....	400	7.7	56.2	6.1	13.3	40.1	132.4	68.2	182.7	17.8
	Establishments with an average of-										
	0 to 4 employees.....	115	.2	1.1	.2	.4	.9	4.2	3.6	7.3	.5
	5 to 9 employees.....	69	.5	3.4	.4	.8	2.5	8.7	3.7	11.2	1.2
	10 to 19 employees.....	92	1.3	9.0	1.1	2.1	6.7	20.4	10.8	27.7	3.4
	20 to 49 employees.....	92	2.8	20.3	2.2	4.7	14.3	45.0	23.8	62.6	6.3
	50 to 99 employees.....	21	1.5	11.1	1.0	2.2	7.0	23.9	12.1	32.3	3.5
	100 to 249 employees.....	11	1.6	11.2	1.3	3.1	8.8	30.2	14.3	41.6	2.9
	Estabs. covered by admin. records.....	40	.1	.3	.1	.1	.2	.8	.5	1.2	.1
1442	Construction sand and gravel: Establishments, total.....	3,069	30.5	202.0	24.8	53.1	154.6	481.7	228.4	625.4	84.7
	Establishments with an average of-										
	0 to 4 employees.....	1,470	2.4	13.6	2.3	4.2	11.6	45.8	23.4	61.1	8.2
	5 to 9 employees.....	623	4.2	27.2	3.5	7.4	22.0	66.9	33.6	86.9	13.5
	10 to 19 employees.....	554	7.5	50.6	6.0	13.2	39.1	119.7	55.0	156.7	18.1
	20 to 49 employees.....	353	10.3	68.1	8.4	18.4	52.4	163.8	77.3	213.5	27.6
	50 to 99 employees.....	50	3.2	22.5	2.6	5.8	16.8	47.6	19.4	60.6	6.4
	100 to 249 employees.....	18	2.8	20.0	2.0	4.1	12.6	37.8	19.7	46.6	10.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	881	1.1	5.3	1.1	1.7	4.6	18.4	8.9	25.1	2.3
1446	Industrial sand: Establishments, total.....	163	4.1	27.2	3.2	6.8	19.1	65.9	33.3	89.6	9.6
	Establishments with an average of-										
	0 to 4 employees.....	41	.1	.5	.1	.2	.3	1.4	0.4	1.6	.1
	5 to 9 employees.....	27	.2	1.2	.2	.3	.8	2.8	1.6	3.9	.6
	10 to 19 employees.....	32	.5	2.9	.3	.7	2.2	7.3	2.9	9.3	.9
	20 to 49 employees.....	45	1.4	9.6	1.1	2.5	6.8	24.1	13.9	34.0	3.9
	50 to 99 employees.....	13	.9	6.1	.7	1.4	4.1	13.1	8.7	19.3	2.5
	100 to 249 employees.....	3	1.0	7.0	.7	1.6	5.1	17.1	5.9	21.5	1.6
	250 to 499 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin records.....	15	(2)	.1	(2)	(2)	(2)	.4	.1	.5	(2)
	Glass sand subindustry: Establishments, total.....	41	1.7	11.3	1.3	2.9	7.9	27.1	13.1	36.4	3.9
	Establishments with an average of-										
	0 to 4 employees.....	5	(2)	.3	(2)	(2)	.1	.7	.4	.9	.2
	5 to 9 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	(2)	.4	(2)	.1	.3	1.3	.7	1.9	.1
	20 to 49 employees.....	18	.6	3.6	.5	1.1	2.8	9.4	5.0	13.0	1.4
	50 to 99 employees.....	6	1.0	7.0	.7	1.6	4.7	15.7	7.0	20.6	2.1
	100 to 249 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Molding sand subindustry: Establishments, total.....	71	1.1	7.6	.9	1.9	5.5	17.4	11.6	25.5	3.5
	Establishments with an average of-										
	0 to 4 employees.....	25	.1	.9	.1	.3	.6	2.2	.9	2.7	.4
	5 to 9 employees.....	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	13	.2	1.1	.1	.3	.9	2.7	1.1	3.4	.4
	20 to 49 employees.....	13	.4	3.4	.3	.7	2.1	7.4	5.5	11.1	1.7
	50 to 99 employees.....	5	.3	2.3	.3	.6	1.9	5.0	4.2	8.2	1.0
	Estabs. covered by admin. records.....	9	(2)	.1	(2)	(2)	(2)	.3	.1	.3	(2)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
		(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
14	Nonmetallic minerals except fuels--Con.										
1446	Industrial sand--Continued										
	Industrial sand, n.e.c. subindustry:										
	Establishments, total.....	51	1.3	8.2	1.0	2.1	5.8	21.4	8.6	27.8	2.2
	Establishments with an average of-										
	0 to 4 employees.....	11	(Z)	.2	(Z)	.1	.1	.6	.2	.7	(Z)
	5 to 9 employees.....	8	.1	.3	.1	.1	.3	.7	.5	1.2	.1
	10 to 19 employees.....	14	.3	1.4	.2	.3	1.0	3.3	1.1	4.0	.4
	20 to 49 employees.....	14	.4	2.6	.3	.7	1.9	7.3	3.4	9.9	.8
	50 to 99 employees.....	2	.6	3.8	.4	.8	2.6	9.5	3.4	12.0	1.0
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1452	Bentonite:										
	Establishments, total.....	32	.9	5.4	.6	1.4	3.4	13.2	8.8	21.2	.9
	Establishments with an average of-										
	0 to 4 employees.....	4	(Z)	.1	(Z)	(Z)	.1	.2	.1	.4	(Z)
	5 to 9 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	10	.1	.8	.1	.2	.7	2.1	1.6	3.4	.4
	20 to 49 employees.....	12	.4	2.1	.3	.7	1.5	6.5	4.2	10.5	.2
	50 to 99 employees.....	3	.3	2.3	.1	.5	1.2	4.4	3.0	7.0	.3
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1453	Fire clay:										
	Establishments, total.....	99	.8	5.1	.7	1.4	4.2	18.5	6.2	23.1	1.5
	Establishments with an average of-										
	0 to 4 employees.....	47	.1	.5	.1	.2	.4	6.2	1.2	7.2	.2
	5 to 9 employees.....	32	.2	1.2	.2	.4	1.1	4.5	1.8	5.9	.4
	10 to 19 employees.....	8	.1	.7	.1	.2	.5	2.5	.6	3.0	.3
	20 to 49 employees.....	11	.4	2.8	.3	.6	2.2	5.2	2.5	7.1	.6
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	26	(Z)	.2	(Z)	.1	.2	.7	.3	.9	.1
1454	Fuller's earth:										
	Establishments, total.....	16	1.1	5.1	1.0	2.0	4.1	15.6	11.0	22.5	4.1
	Establishments with an average of-										
	0 to 4 employees.....	2	.1	.1	.1	.1	.1	.4	.1	.5	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	.2	.9	.2	.3	.7	2.8	1.2	3.7	.4
	50 to 99 employees.....	4	.9	4.1	.7	1.7	3.3	12.4	9.6	18.4	3.7
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1455	Kaolin and ball clay:										
	Establishments, total.....	63	3.7	24.1	2.9	6.4	16.7	65.1	34.4	87.9	11.6
	Establishments with an average of										
	0 to 4 employees.....	14	(Z)	.1	(Z)	(Z)	.1	.3	.1	.4	(Z)
	5 to 9 employees.....	8	.1	.3	(Z)	.1	.2	1.1	.3	1.3	.1
	10 to 19 employees.....	7	.1	.8	.1	.1	.3	1.5	.7	2.2	.1
	20 to 49 employees.....	17	.5	3.3	.4	.9	2.1	8.5	4.6	12.0	1.0
	50 to 99 employees.....	10	1.1	7.3	.9	1.8	4.7	17.5	8.2	22.9	2.6
	100 to 249 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	2	2.0	12.3	1.5	3.4	9.3	36.3	20.5	49.1	7.7
	500 to 999 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estab. covered by admin. records.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1456	Feldspar:										
	Establishments, total.....	17	.5	2.6	.4	.9	2.0	6.6	3.4	9.4	.5
	Establishments with an average of-										
	0 to 4 employees.....	3	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	4	.1	.4	(Z)	.1	.2	.3	.3	.5	.1
	20 to 49 employees.....	6	.4	2.2	.4	.9	1.8	6.2	3.1	8.9	.5
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967--Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
14	Nonmetallic minerals except fuels--Con.										
1459	Clay and related minerals, n.e.c.: Establishments, total.....	129	2.3	15.4	2.0	4.4	12.5	35.7	23.9	54.1	5.5
	Establishments with an average of-										
	0 to 4 employees.....	53	.1	.4	.1	.1	.4	.9	.5	1.3	.1
	5 to 9 employees.....	17	.1	.7	.1	.2	.6	1.6	.9	2.4	.1
	10 to 19 employees.....	20	.3	1.8	.3	.6	1.5	5.3	2.4	7.2	.5
	20 to 49 employees.....	32	1.0	7.2	.8	2.0	5.4	18.1	12.5	28.5	2.1
	50 to 99 employees.....	4	.3	1.8	.3	.6	1.5	3.2	1.6	4.7	.3
	100 to 249 employees.....	3	.5	3.5	.4	.9	3.0	6.5	5.9	10.0	2.4
	Estabs. covered by admin. records.....	29	(Z)	.1	(Z)	.1	.1	.4	.2	.6	(Z)
1472	Barite: Establishments, total.....	30	.9	4.7	.8	1.6	3.9	15.3	5.6	19.6	1.2
	Establishments with an average of-										
	0 to 4 employees.....	10	.1	.2	.1	.1	.2	2.2	.9	2.8	.3
	5 to 9 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	.1	.3	.1	.1	.3	1.7	.4	2.1	(Z)
	20 to 49 employees.....	4	.1	.6	.1	.2	.5	1.6	2.0	2.0	.5
	50 to 99 employees.....	3	.2	1.2	.2	.4	1.0	3.6	(D)	4.7	(D)
	100 to 249 employees.....	3	.5	2.2	.4	.8	1.9	6.2	2.2	8.1	.3
	Estabs. covered by admin. records ¹	6	(Z)	(Z)	(Z)	(Z)	(Z)	.1	.1	.2	(Z)
1473	Fluorspar: Establishments, total.....	32	.7	4.7	.6	1.3	3.7	11.0	9.7	19.6	1.1
	Establishments with an average of-										
	0 to 4 employees.....	15	.1	.6	.1	.2	.3	1.2	1.1	2.0	.2
	5 to 9 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	.6	4.0	.6	1.1	3.4	9.9	8.5	17.5	.9
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	.3	.1	.2	.1
1474	Potash, soda, and borate minerals: Establishments, total.....	33	7.9	67.8	5.1	10.7	41.4	187.7	71.0	215.7	43.0
	Establishments with an average of-										
	0 to 4 employees.....	4	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(D)
	5 to 9 employees.....	1	1.3	12.7	.5	1.1	4.0	27.3	18.9	31.3	14.7
	20 to 49 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	6	2.4	18.7	1.5	3.1	11.5	38.0	19.2	47.9	9.3
	500 to 999 employees.....	6	4.3	36.6	3.1	6.5	25.8	122.5	32.9	136.4	19.0
	Estabs. covered by admin. records.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1475	Phosphate rock: Establishments, total.....	69	8.1	59.6	5.4	12.0	35.3	199.3	145.0	296.6	47.7
	Establishments with an average of-										
	0 to 4 employees.....	9	(Z)	.4	(Z)	(Z)	.4	.7	14.0	.5	7.3
	5 to 9 employees.....	7	.1	.2	(Z)	.1	.2	.9	(D)	1.2	(D)
	10 to 19 employees.....	12	.2	1.1	.1	.3	.6	2.5	(D)	6.9	(D)
	20 to 49 employees.....	5	.2	1.0	.1	.3	.7	8.7	(D)	10.8	(D)
	50 to 99 employees.....	11	.9	6.1	.8	1.6	4.9	32.2	32.1	57.2	7.1
	100 to 249 employees.....	16	2.4	17.4	1.9	4.0	12.6	66.4	56.3	111.4	11.3
	250 to 499 employees.....	6	4.4	33.4	2.6	5.8	15.9	88.0	42.5	108.4	22.1
	500 to 999 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1476	Rock salt: Establishments, total.....	26	2.6	19.3	1.9	4.4	13.0	70.9	17.7	81.3	7.3
	Establishments with an average of-										
	0 to 4 employees.....	4	.3	1.8	.2	.3	.8	6.7	1.3	7.8	.3
	5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	4	.2	1.7	.2	.5	1.4	4.7	1.9	6.0	.5
	100 to 249 employees.....	5	2.1	15.8	1.6	3.6	10.9	59.4	14.6	67.5	6.6
	250 to 499 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	3	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
14	Nonmetallic minerals, except fuels--Con.										
1477	Sulfur:										
	Establishments, total.....	31	3.2	30.5	1.8	4.0	15.1	253.2	48.3	271.2	30.3
	Establishments with an average of-										
	0 to 4 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1479	Chemical and fertilizer mining, n.e.c.:										
	Establishments, total.....	12	.3	1.6	.2	.4	1.1	3.4	2.9	5.6	.7
	Establishments with an average of-										
	0 to 4 employees.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(D)	.1	(D)
	5 to 9 employees.....	3	.3	1.5	.2	.4	1.0	3.4	2.9	5.6	(D)
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1481	Nonmetallic minerals services:										
	Establishments, total.....	106	.8	5.9	.8	1.5	4.9	11.2	5.9	15.3	1.9
	Establishments with an average of-										
	0 to 4 employees.....	64	.1	.6	.1	.2	.5	1.3	.7	1.8	.2
	5 to 9 employees.....	21	.2	.9	.1	.3	.8	1.9	.9	2.5	.3
	10 to 19 employees.....	11	.1	1.0	.1	.2	.7	2.0	1.1	2.7	.4
	20 to 49 employees.....	7	.4	3.4	.4	.8	2.9	6.0	3.2	8.3	1.0
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	37	.1	.2	.1	.1	.2	.6	.3	.8	.1
1492	Gypsum:										
	Establishments, total.....	33	.4	2.3	.3	.7	1.9	7.4	2.5	9.3	.6
	Establishments with an average of-										
	0 to 4 employees.....	14	(Z)	.1	(Z)	(Z)	.1	.3	.5	.8	.1
	5 to 9 employees.....	9	.1	.4	(Z)	.1	.3	1.4	.6	1.8	.2
	10 to 19 employees.....	5	.1	.4	.1	.1	.3	1.4	.5	1.7	.2
	20 to 49 employees.....	3	.3	1.5	.2	.4	1.2	4.3	.8	4.9	.2
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	9	(Z)	(Z)	(Z)	(Z)	(Z)	.2	.1	.2	(Z)
1493	Mica:										
	Establishments, total.....	20	.3	1.8	.3	.5	1.2	5.3	1.9	6.7	.4
	Establishments with an average of-										
	0 to 4 employees.....	9	(Z)	.1	.1	(Z)	(Z)	.5	.1	.6	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	.1	.3	.1	.2	.2	.8	.4	1.1	.1
	20 to 49 employees.....	4	.3	1.3	.1	.4	1.0	4.1	1.3	5.0	.3
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)
1494	Native asphalt and bitumens:										
	Establishments, total.....	12	.5	3.0	.4	.8	2.2	5.8	3.7	8.7	.8
	Establishments with an average of-										
	0 to 4 employees.....	2	(Z)	.4	(Z)	.1	.2	.3	.1	.5	(Z)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	4	.1	.7	.1	.2	.4	1.2	.5	1.6	(Z)
	50 to 99 employees.....	2	.4	2.1	.2	.6	1.6	4.3	3.1	6.6	.7
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. General Statistics, by Employment Size of Establishment: 1967—Continued

Code	Industry and Item	1967									
		Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
14	Nonmetallic minerals, except fuels--Con.										
1495	Pumice and pumicite:										
	Establishments, total.....	29	.2	1.0	.1	.2	.7	2.0	1.0	2.8	.5
	Establishments with an average of-										
	0 to 4 employees.....	19	(Z)	.1	(Z)	(Z)	.1	.4	.2	.6	(Z)
	5 to 9 employees.....	6	(Z)	.2	(Z)	.1	.2	.6	.1	.6	.1
	10 to 19 employees.....	2	.2	.6	.1	.2	.4	1.1	.7	1.6	.1
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	11	(Z)	.1	(Z)	(Z)	.1	.2	.1	.4	(Z)
1496	Talc, soapstone, and pyrophyllite:										
	Establishments, total.....	53	1.2	7.4	1.1	2.3	5.8	16.9	6.1	21.3	1.7
	Establishments with an average of-										
	0 to 4 employees.....	18	(Z)	.2	(Z)	.1	.2	.4	.1	.5	(Z)
	5 to 9 employees.....	4	(Z)	.2	(Z)	(Z)	.2	.6	.1	.7	(Z)
	10 to 19 employees.....	13	.2	1.2	.1	.3	.7	2.4	.7	3.0	.2
	20 to 49 employees.....	12	.4	2.2	.3	.7	1.6	4.0	2.3	5.8	.6
	50 to 99 employees.....	4	.6	3.7	.5	1.2	3.3	9.4	2.7	11.3	.8
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)
1497	Natural abrasives, except sand:										
	Establishments, total.....	20	.3	2.2	.2	.5	1.4	4.3	2.8	5.7	1.4
	Establishments with an average of-										
	0 to 4 employees.....	6	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)
	5 to 9 employees.....	5	(Z)	.2	(Z)	.1	.1	.4	.2	.5	.1
	10 to 19 employees.....	4	.3	2.0	.1	.5	1.2	3.7	2.7	5.1	1.3
	20 to 49 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1498	Peat:										
	Establishments, total.....	76	.5	2.3	.4	1.0	2.0	6.7	2.3	8.5	.5
	Establishments with an average of-										
	0 to 4 employees.....	50	.1	.4	.1	.2	.4	.9	.4	1.3	.1
	5 to 9 employees.....	9	.1	.3	.1	.1	.2	.6	.3	.9	.1
	10 to 19 employees.....	13	.2	.7	.1	.4	.6	1.8	.8	2.4	.3
	20 to 49 employees.....	3	.2	.9	.2	.4	.8	3.3	.7	4.0	.1
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	27	(Z)	.1	(Z)	.1	.1	.3	.2	.4	(Z)
1499	Nonmetallic minerals, n.e.c.:										
	Establishments, total.....	135	2.9	20.9	2.3	4.9	15.3	62.8	30.8	88.9	4.7
	Establishments with an average of-										
	0 to 4 employees.....	77	.1	.5	.1	.2	.5	1.8	.9	2.3	.4
	5 to 9 employees.....	15	.1	.6	.1	.1	.4	1.3	.7	1.8	.2
	10 to 19 employees.....	11	.2	1.0	.1	.2	.8	3.1	1.3	4.1	.3
	20 to 49 employees.....	15	.4	3.0	.3	.7	1.9	7.7	3.0	10.2	.6
	50 to 99 employees.....	9	.6	4.1	.4	.9	2.7	10.9	5.3	14.8	1.3
	100 to 249 employees.....	7	1.5	11.7	1.2	2.7	9.1	38.0	19.6	55.7	1.8
	500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	52	.1	.3	.1	.1	.3	.8	.5	1.2	.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures.
(Z) Represents less than one-half of the unit of measure specified.

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry, and for individual products or classes of products are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral

product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being

primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Type of Operation—The type-of-operation statistics in industry reports are primarily based on replies to a check-box inquiry which listed the usual mining and mineral preparation methods used in a particular industry. The respondent was asked to check each method used in the establishment reported. Where possible, separate statistics are provided on establishments using underground mining methods only, using a combination of underground and open-pit methods, and using open-pit methods only. For selected industries, separate statistics are provided by type of underground mining for establishments having a dominant method, such as open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and non-producing operations (an establishment being defined as non-producing if no mineral products were shipped or services performed during the year). For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented oil wells only, both oil and gas wells, or gas wells only, and on the basis of whether or not they drilled wells. For certain industries, the administrative records data for establishments with 1 to 4 employees and also for all contract service operations are included in an undistributed category.

1967 CENSUS OF Mineral Industries



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SUBJECT SERIES

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
James T. Lynn, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 5 subject reports. Additional separate reports will be issued for individual industries or groups of related industries and for each State. Other reports in this series cover general summary, size of establishment, and capital expenditures.

These previously issued reports show figures for industries of States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used. In addition, the State reports contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The Introduction to the General Summary report of the 1967 Census of Mineral Industries discusses at greater length many of the subjects described briefly in this introduction. For example, the General Summary text discusses the economic significance of the mining sector; the relation of value added in mining to national income originating in mining; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the

United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST
New England
Middle Atlantic

SOUTH
South Atlantic
East South Central
West South Central

NORTH CENTRAL
East North Central
West North Central

WEST
Mountain
Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

Contents

	page
TABLE 1 Selected Statistics for Major Industry Groups 1967 and 1963, and Industries	3
2 Selected Statistics for Industries by Geographic Areas: 1967	10
3 General Statistics for Nonproducing Establishments, by Industry Groups and Industries: 1967 and 1963	15
APPENDIX Explanation of Terms	A1

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments											Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants	Undis- tributed		
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods				
	All mineral operations, 1967:														
	Establishments.....number..	28,579	28,031	9,294	3,200	1,151	4,943	5,185	731	4,005	449	977	12,575	548	
	Employees.....1,000..	567.3	564.5	143.7	35.9	14.2	93.4	227.8	99.2	111.3	17.4	21.7	171.0	2.9	
	Value added in mining..mil.dol..	19,330.2	19,359.1	11,880.1	426.9	304.0	11,149.2	4,516.6	1,655.1	2,527.6	334.2	1,147.3	1,815.1	-29.0	
	All mineral operations, 1963:														
	Establishments.....number..	32,063	30,079	20,910	5,152	2,400	13,358	8,109	971	6,495	643	1,060	(X)	1,984	
	Employees.....1,000..	497.7	492.9	218.0	45.8	19.8	152.4	236.9	96.9	116.7	23.2	26.5	(X)	4.8	
	Value added in mining..mil.dol..	14,607.8	14,644.0	9,948.3	417.1	326.2	9,205.0	3,684.8	1,309.2	2,031.1	344.4	1,014.4	(X)	-36.2	
10	Metal mining, 1967:														
	Establishments.....number..	1,155	1,049	517	347	167	3	266	82	174	10	47	219	106	
	Employees.....1,000..	70.9	70.0	13.4	5.7	5.5	2.2	44.9	23.8	20.5	.6	4.9	6.7	1.0	
	Value added in mining..mil.dol..	1,556.6	1,576.2	270.8	90.1	152.7	28.1	1,132.4	386.7	735.4	10.4	139.5	33.6	-19.7	
10	Metal mining, 1963:														
	Establishments.....number..	1,531	1,035	578	406	160	12	392	108	274	10	65	(X)	496	
	Employees.....1,000..	75.0	73.0	18.1	8.0	6.8	3.3	43.5	23.4	19.2	.9	6.8	(X)	2.0	
	Value added in mining..mil.dol..	1,393.5	1,396.3	323.4	136.2	156.6	30.6	916.7	338.3	560.4	17.9	159.5	(X)	-2.8	
1011	1967														
	Iron ores:														
	Establishments.....number..	146	140	53	8	45	-	60	7	52	1	10	17	6	
	Employees.....1,000..	22.6	22.6	4.1	1.8	2.3	-	15.5	(D)	11.6	(D)	1.7	1.3	(Z)	
1021	Value added in mining..mil.dol..	661.9	661.8	75.5	34.0	41.5	-	505.0	(D)	446.2	(D)	81.2	-	.1	
	Copper ores:														
	Establishments.....number..	156	126	65	4	60	1	27	7	20	-	8	26	30	
	Employees.....1,000..	20.9	20.5	5.8	1.1	(D)	(D)	10.8	4.3	6.5	-	1.9	2.0	.4	
1031	Value added in mining..mil.dol..	436.5	451.8	124.7	14.9	(D)	(D)	293.0	72.8	220.2	-	34.2	-	-15.4	
	Lead and zinc ores:														
	Establishments.....number..	167	148	94	94	-	-	37	37	-	-	7	10	19	
	Employees.....1,000..	9.1	8.9	1.4	1.4	-	-	6.9	6.9	-	-	.3	.3	.2	
	Value added in mining..mil.dol..	102.6	104.8	17.6	17.6	-	-	87.7	87.7	-	-	.5	-	-2.2	
	Lead ores:														
	Establishments.....number..	104	87	70	70	-	-	9	9	-	-	1	7	17	
	Employees.....1,000..	4.2	(D)	1.0	1.0	-	-	2.7	2.7	-	-	(D)	(D)	(D)	
	Value added in mining..mil.dol..	36.9	(D)	12.8	12.8	-	-	30.2	30.2	-	-	(D)	(D)	(D)	
	Zinc ores:														
	Establishments.....number..	63	61	24	24	-	-	28	28	-	-	6	3	2	
	Employees.....1,000..	4.9	(D)	.4	.4	-	-	4.2	4.2	-	-	(D)	(D)	(D)	
	Value added in mining..mil.dol..	65.7	(D)	4.8	4.8	-	-	57.5	57.5	-	-	(D)	(D)	(D)	
	104	Gold and silver ores:													
		Establishments.....number..	183	156	96	95	1	-	57	12	44	1	-	3	27
		Employees.....1,000..	3.8	(D)	(D)	.3	(D)	-	3.4	(D)	(D)	(D)	-	(D)	(D)
Value added in mining..mil.dol..		51.3	(D)	(D)	7	(D)	-	50.5	(D)	(D)	(D)	-	(D)	(D)	
1042	Lode gold:														
	Establishments.....number..	77	67	59	59	-	-	7	4	2	1	-	1	10	
	Employees.....1,000..	2.4	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	-	(D)	(D)	
	Value added in mining..mil.dol..	33.3	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	-	(D)	(D)	
1043	Placer gold:														
	Establishments.....number..	48	42	-	-	-	-	42	-	42	-	-	-	6	
	Employees.....1,000..	.2	(D)	-	-	-	-	(D)	-	(D)	-	-	-	(D)	
	Value added in mining..mil.dol..	2.1	(D)	-	-	-	-	(D)	-	(D)	-	-	-	(D)	
1044	Silver ores:														
	Establishments.....number..	58	47	37	36	1	-	8	8	-	-	-	2	11	
	Employees.....1,000..	1.2	1.1	(D)	(D)	(D)	-	1.0	1.0	-	-	-	(D)	(Z)	
	Value added in mining..mil.dol..	16.0	16.0	(D)	(D)	(D)	-	15.5	15.5	-	-	-	(D)	.1	
1051	Bauxite and other aluminum ores:														
	Establishments.....number..	17	17	10	-	9	1	2	-	2	-	4	1	-	
	Employees.....1,000..	.6	.6	.5	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	-	
	Value added in mining..mil.dol..	22.5	22.5	20.9	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	-	

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments											Nonpro- ducing estab- lish- ments
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants	Undis- tributed	
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods			
	1967-Continued													
10	Metal mining-Continued													
106	Ferroalloy ores, except vanadium:													
	Establishments.....number..	43	41	22	9	13	-	13	7	1	5	5	1	2
	Employees.....1,000..	4.0	(D)	.1	(Z)	.1	-	3.7	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	73.4	(D)	7.4	.2	7.2	-	65.1	(D)	(D)	(D)	(D)	(D)	(D)
1062	Manganese ores:													
	Establishments.....number..	20	18	12	-	12	-	2	2	-	-	4	-	2
	Employees.....1,000..	.2	(D)	(D)	-	(D)	-	(D)	(D)	-	-	(D)	-	(D)
	Value added in mining..mil.dol..	1.8	(D)	(D)	-	(D)	-	(D)	(D)	-	-	(D)	-	(D)
1064	Tungsten and ferroalloy ores, n.e.c.:													
	Establishments.....number..	23	23	10	9	1	-	11	5	1	5	1	1	-
	Employees.....1,000..	3.8	3.8	(D)	(Z)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	71.7	71.7	(D)	.2	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	-
1081	Metal mining services:													
	Establishments.....number..	148	148	-	-	-	-	-	-	-	-	-	148	-
	Employees.....1,000..	2.6	2.6	-	-	-	-	-	-	-	-	-	2.6	-
	Value added in mining..mil.dol..	33.6	33.6	-	-	-	-	-	-	-	-	-	33.6	-
109	Miscellaneous metal ores:													
	Establishments.....number..	295	273	177	137	39	1	70	12	55	3	13	13	22
	Employees.....1,000..	7.4	7.1	1.2	1.1	(D)	(D)	4.7	2.5	1.7	.4	.8	.3	.3
	Value added in mining..mil.dol..	174.8	177.3	24.0	22.7	(D)	(D)	130.7	77.8	43.0	9.9	22.6	-	-2.5
1092	Mercury ores:													
	Establishments.....number..	62	57	3	3	-	-	52	6	44	2	1	1	5
	Employees.....1,000..	.7	.7	(D)	(D)	-	-	.6	(D)	.2	(D)	(D)	(D)	(Z)
	Value added in mining..mil.dol..	8.3	8.3	(D)	(D)	-	-	8.5	(D)	2.0	(D)	(D)	(D)	(Z)
1093	Titanium ores:													
	Establishments.....number..	7	7	-	-	-	-	6	-	6	-	-	1	-
	Employees.....1,000..	.9	.9	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	17.3	17.3	-	-	-	-	(D)	-	(D)	-	-	(D)	-
1094	Uranium-radium-vanadium ores:													
	Establishments.....number..	188	174	144	134	9	1	10	6	3	1	9	11	14
	Employees.....1,000..	5.4	5.1	1.1	(D)	(D)	(D)	3.0	(D)	(D)	(D)	(D)	(D)	.3
	Value added in mining..mil.dol..	142.1	144.7	23.3	(D)	(D)	(D)	100.6	(D)	(D)	(D)	(D)	(D)	-2.6
1099	Metallic ores, n.e.c.:													
	Establishments.....number..	38	35	30	-	30	-	2	-	2	-	3	-	3
	Employees.....1,000..	.3	.3	(D)	-	(D)	-	(D)	-	(D)	-	(D)	-	(Z)
	Value added in mining..mil.dol..	7.1	7.0	(D)	-	(D)	-	(D)	-	(D)	-	(D)	-	.1
11	Anthracite mining, 1967:													
	Establishments.....number..	403	399	282	248	23	11	33	11	10	12	47	37	4
	Employees.....1,000..	7.2	7.2	2.7	1.7	1.0	.1	2.6	1.3	.6	.7	.8	1.1	(Z)
	Value added in mining..mil.dol..	82.1	82.1	34.1	16.1	16.4	1.6	32.0	12.7	7.4	12.0	8.2	7.4	(Z)
11	Anthracite mining, 1963:													
	Establishments.....number..	1,026	1,021	869	748	82	39	73	10	14	49	79	(X)	5
	Employees.....1,000..	10.7	10.7	4.1	2.5	.9	.6	4.9	.7	.7	3.5	1.2	(X)	(Z)
	Value added in mining..mil.dol..	110.5	110.5	42.9	23.0	12.5	7.4	53.1	3.7	9.6	39.9	14.5	(X)	-
1967														
1111	Anthracite:													
	Establishments.....number..	371	367	282	248	23	11	33	11	10	12	47	5	4
	Employees.....1,000..	6.4	6.4	2.7	1.7	1.0	.1	2.6	1.3	.6	.7	.8	.3	(Z)
	Value added in mining..mil.dol..	74.7	74.7	34.1	16.1	16.4	1.6	32.0	12.7	7.4	12.0	8.5	-	(Z)
1112	Anthracite mining services:													
	Establishments.....number..	32	32	-	-	-	-	-	-	-	-	-	32	-
	Employees.....1,000..	.8	.8	-	-	-	-	-	-	-	-	-	.8	-
	Value added in mining..mil.dol..	7.4	7.4	-	-	-	-	-	-	-	-	-	7.4	-

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments										Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants		Undis- tributed
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods			
12	Bituminous coal and lignite mining, 1967:													
	Establishments.....number..	4,081	4,056	2,821	2,559	195	67	901	510	265	126	110	224	25
	Employees.....1,000..	124.4	124.3	32.1	27.6	3.0	1.4	83.7	64.4	11.8	7.5	1.9	6.6	.2
	Value added in mining..mil.dol..	2,009.2	2,008.4	393.0	303.2	62.5	27.3	1,555.0	1,053.7	348.4	152.9	38.7	21.7	.8
12	Bituminous coal and lignite mining, 1963:													
	Establishments.....number..	6,174	6,135	4,727	3,947	592	188	1,233	731	365	137	175	(X)	39
	Employees.....1,000..	132.6	132.4	43.0	34.6	5.2	3.2	82.8	62.0	11.8	8.9	2.7	(X)	.1
	Value added in mining..mil.dol..	1,589.9	1,589.3	377.5	250.1	84.1	43.3	1,170.3	776.1	257.2	137.1	41.4	(X)	.6
	1967													
1211	Bituminous coal:													
	Establishments.....number..	3,921	3,896	2,793	2,559	167	67	884	510	248	126	110	109	25
	Employees.....1,000..	122.5	122.4	32.0	27.6	2.9	1.4	83.3	64.4	11.4	7.5	1.9	5.2	.2
	Value added in mining..mil.dol..	1,974.6	1,973.8	392.5	303.2	62.0	27.3	1,542.6	1,053.7	336.0	152.9	38.7	-	.8
1212	Lignite:													
	Establishments.....number..	45	45	28	-	28	-	17	-	17	-	-	-	-
	Employees.....1,000..	.5	.5	.1	-	.1	-	.4	-	.4	-	-	-	-
	Value added in mining..mil.dol..	12.9	12.9	.5	-	.5	-	12.4	-	12.4	-	-	-	-
1213	Bituminous and lignite mining services, n.e.c.													
	Establishments.....number..	115	115	-	-	-	-	-	-	-	-	-	115	-
	Employees.....1,000..	1.4	1.4	-	-	-	-	-	-	-	-	-	1.4	-
	Value added in mining..mil.dol..	21.7	21.7	-	-	-	-	-	-	-	-	-	21.7	-
13	Oil and gas extraction, 1967:													
	Establishments.....number..	16,358	15,998	4,824	-	-	4,824	-	-	-	-	659	10,515	360
	Employees.....1,000..	244.9	243.6	87.4	-	-	87.4	-	-	-	-	12.0	144.2	1.3
	Value added in mining..mil.dol..	13,394.3	13,416.9	10,841.6	-	-	10,841.6	-	-	-	-	903.6	1,671.7	-22.7
13	Oil and gas extraction, 1963:													
	Establishments.....number..	15,030	13,727	13,082	-	-	13,082	-	-	-	-	645	(X)	1,303
	Employees.....1,000..	159.1	157.0	143.2	-	-	143.2	-	-	-	-	13.9	(X)	2.1
	Value added in mining..mil.dol..	9,778.4	9,812.4	9,049.8	-	-	9,049.8	-	-	-	-	762.6	(X)	-34.0
	1967													
1311	Crude petroleum and natural gas:													
	Establishments.....number..	8,796	844.9	4,824	-	-	4,824	-	-	-	-	-	3,625	347
	Employees.....1,000..	126.4	125.1	87.4	-	-	87.4	-	-	-	-	-	37.7	1.3
	Value added in mining..mil.dol..	10,965.0	10,989.1	10,841.6	-	-	10,841.6	-	-	-	-	-	147.5	-24.1
	Crude petroleum subindustries:													
	Establishments.....number..	7,278	6,967	3,801	-	-	3,801	-	-	-	-	-	3,166	311
	Employees.....1,000..	106.8	105.6	71.1	-	-	71.1	-	-	-	-	-	34.5	1.2
	Value added in mining..mil.dol..	8,943.0	8,965.5	8,837.5	-	-	8,837.5	-	-	-	-	-	128.0	-22.5
	Natural gas subindustries:													
	Establishments.....number..	1,518	1,482	1,023	-	-	1,023	-	-	-	-	-	459	36
	Employees.....1,000..	19.6	19.5	16.3	-	-	16.3	-	-	-	-	-	3.2	.1
	Value added in mining..mil.dol..	2,022.1	2,023.6	2,004.1	-	-	2,004.1	-	-	-	-	-	19.5	-1.5
1321	Natural gas liquids:													
	Establishments.....number..	684	671	-	-	-	-	-	-	-	-	659	12	13
	Employees.....1,000..	12.4	12.4	-	-	-	-	-	-	-	-	12.0	.4	(Z)
	Value added in mining..mil.dol..	905.0	903.6	-	-	-	-	-	-	-	-	903.6	-	1.4

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods			
13	1967-Continued													
138	Oil and gas extraction-Continued													
	Oil and gas field services:													
	Establishments.....number..	6,878	6,878	-	-	-	-	-	-	-	-	-	6,878	-
	Employees.....1,000..	106.1	106.1	-	-	-	-	-	-	-	-	-	106.1	-
	Value added in mining..mil.dol..	1,524.2	1,524.2	-	-	-	-	-	-	-	-	-	1,524.2	-
1381	Drilling oil and gas wells:													
	Establishments.....number..	2,347	2,347	-	-	-	-	-	-	-	-	-	2,347	-
	Employees.....1,000..	42.9	42.9	-	-	-	-	-	-	-	-	-	42.9	-
	Value added in mining..mil.dol..	627.4	627.4	-	-	-	-	-	-	-	-	-	627.4	-
1382	Oil and gas exploration services:													
	Establishments.....number..	636	636	-	-	-	-	-	-	-	-	-	636	-
	Employees.....1,000..	8.4	8.4	-	-	-	-	-	-	-	-	-	8.4	-
	Value added in mining..mil.dol..	126.4	126.4	-	-	-	-	-	-	-	-	-	126.4	-
1389	Oil and gas field services, n.e.c.:													
	Establishments.....number..	3,895	3,895	-	-	-	-	-	-	-	-	-	3,895	-
	Employees.....1,000..	54.8	54.8	-	-	-	-	-	-	-	-	-	54.8	-
	Value added in mining..mil.dol..	770.4	770.4	-	-	-	-	-	-	-	-	-	770.4	-
14	Nonmetallic minerals, except fuels, 1967:													
	Establishments.....number..	6,582	6,529	850	46	766	38	3,985	128	3,556	301	114	1,580	53
	Employees.....1,000..	119.9	119.4	8.1	.9	4.7	2.3	96.6	9.7	78.4	8.6	2.1	12.4	.4
	Value added in mining..mil.dol..	2,288.0	2,275.5	340.3	17.4	72.4	250.6	1,797.2	202.0	1,436.4	158.9	57.3	80.7	12.6
14	Nonmetallic minerals, except fuels, 1963:													
	Establishments.....number..	8,302	8,161	1,654	51	1,566	37	6,411	122	5,842	447	96	(X)	141
	Employees.....1,000..	120.4	119.8	9.7	.7	6.8	2.1	105.7	10.8	85.0	9.9	9.0	(X)	.6
	Value added in mining..mil.dol..	1,735.4	1,735.5	154.7	7.7	73.0	74.0	1,544.6	191.1	1,204.0	149.5	36.4	(X)	-1
1411	1967													
	Dimension stone:													
	Establishments.....number..	244	244	207	-	207	-	34	1	33	-	-	3	-
	Employees.....1,000..	1.9	1.9	1.3	-	1.3	-	.5	(D)	(D)	-	-	(Z)	-
	Value added in mining..mil.dol..	18.1	18.1	13.5	-	13.5	-	4.7	(D)	(D)	-	-	-	-
	Dimension limestone subindustry:													
	Establishments.....number..	46	46	29	-	29	-	16	-	16	-	-	1	-
	Employees.....1,000..	.5	.5	.3	-	.3	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	5.4	5.4	2.7	-	2.7	-	(D)	-	(D)	-	-	(D)	-
	Dimension granite subindustry:													
	Establishments.....number..	50	50	47	-	47	-	2	-	2	-	-	1	-
	Employees.....1,000..	.6	.6	.6	-	.6	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	6.8	6.8	6.5	-	6.5	-	(D)	-	(D)	-	-	(D)	-
	Dimension stone, n.e.c. subindustry:													
	Establishments.....number..	148	148	131	-	131	-	16	1	15	-	-	1	-
	Employees.....1,000..	.8	.8	.5	-	.5	-	(D)	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	5.9	5.9	4.2	-	4.2	-	(D)	(D)	(D)	-	-	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	2,033	2,016	61	5	55	1	1,866	72	1,775	19	35	54	17
	Employees.....1,000..	42.9	42.8	(D)	(D)	.6	(D)	40.5	(D)	37.6	(D)	(D)	1.2	.1
	Value added in mining..mil.dol..	704.7	704.0	(D)	(D)	10.4	(D)	683.7	(D)	641.9	(D)	(D)	-	.7
1422	Crushed and broken limestone:													
	Establishments.....number..	1,484	1,471	43	4	38	1	1,377	60	1,299	18	21	30	13
	Employees.....1,000..	30.8	30.7	.5	(D)	.5	(D)	29.2	1.6	26.7	.9	.3	.7	.1
	Value added in mining..mil.dol..	492.2	492.2	9.1	(D)	6.9	(D)	477.3	22.9	443.7	10.7	5.8	-	(Z)
1423	Crushed and broken granite:													
	Establishments.....number..	149	147	2	-	2	-	141	6	135	-	1	3	2
	Employees.....1,000..	4.5	(D)	(D)	-	(D)	-	(D)	(D)	4.3	-	(D)	(Z)	(D)
	Value added in mining..mil.dol..	80.1	(D)	(D)	-	(D)	-	(D)	(D)	77.3	-	(D)	-	(D)
1429	Crushed and broken stone, n.e.c.:													
	Establishments.....number..	400	398	16	1	15	-	348	6	341	1	13	21	2
	Employees.....1,000..	7.7	(D)	.1	(D)	(D)	-	(D)	3	6.6	(D)	.1	.5	(D)
	Value added in mining..mil.dol..	132.4	(D)	1.8	(D)	(D)	-	(D)	6.7	120.9	(D)	1.9	-	(D)

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments											Nonpro- ducing estab- lish- ments
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants	Undis- tributed	
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods			
14	1967-Continued													
144	Nonmetallic minerals, except fuels-Continued													
	Sand and gravel:													
	Establishments.....number..	3,232	3,213	221	-	199	22	1,584	-	1,330	254	54	1,354	19
	Employees.....1,000..	34.6	34.4	1.4	-	1.2	.2	26.3	-	21.9	4.4	.7	6.1	.1
	Value added in mining..mil.dol..	547.5	547.3	22.4	-	18.9	3.6	449.2	-	374.9	74.3	9.4	66.3	.3
1442	Construction sand and gravel:													
	Establishments.....number..	3,069	3,053	209	-	188	21	1,454	-	1,207	247	46	1,344	16
	Employees.....1,000..	30.5	30.4	1.3	-	(D)	(D)	22.7	-	18.5	4.2	.5	5.9	.1
	Value added in mining..mil.dol..	481.7	481.3	21.2	-	(D)	(D)	387.2	-	315.2	72.0	6.6	66.3	.4
1446	Industrial sand:													
	Establishments.....number..	163	160	12	-	11	1	130	-	123	7	8	10	3
	Employees.....1,000..	4.1	4.0	(Z)	-	(D)	(D)	3.6	-	3.4	.2	.2	.2	(Z)
	Value added in mining..mil.dol..	65.9	66.0	1.2	-	(D)	(D)	62.0	-	59.7	2.3	2.8	-	-1
	Glass sand subindustry:													
	Establishments.....number..	41	39	3	-	3	-	31	-	31	-	-	5	2
	Employees.....1,000..	1.7	(D)	(D)	-	(D)	-	1.5	-	1.5	-	-	.1	(D)
	Value added in mining..mil.dol..	27.1	(D)	(D)	-	(D)	-	26.9	-	26.9	-	-	-	(D)
	Molding sand subindustry:													
	Establishments.....number..	71	70	5	-	4	1	61	-	57	4	-	4	1
	Employees.....1,000..	1.1	(D)	(D)	-	(D)	(D)	1.0	-	.9	.1	-	(D)	(D)
	Value added in mining..mil.dol..	17.4	(D)	(D)	-	(D)	(D)	16.9	-	15.2	1.7	-	(D)	(D)
	Industrial sand, n.e.c. subindustry:													
	Establishments.....number..	51	51	4	-	4	-	38	-	35	3	8	1	-
	Employees.....1,000..	1.3	1.3	(D)	-	(D)	-	1.1	-	1.0	.1	.2	(D)	-
	Value added in mining..mil.dol..	21.4	21.4	(D)	-	(D)	-	18.2	-	17.6	.6	2.8	(D)	-
145	Clay and related minerals:													
	Establishments.....number..	356	350	178	5	171	2	161	2	158	1	-	11	6
	Employees.....1,000..	9.4	(D)	1.0	(D)	.8	(D)	7.7	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	154.6	(D)	20.8	(D)	18.9	(D)	133.1	(D)	(D)	(D)	-	(D)	(D)
1452	Bentonite:													
	Establishments.....number..	32	32	10	-	10	-	20	-	20	-	-	2	-
	Employees.....1,000..	.9	.9	(D)	-	(D)	-	.6	-	.6	-	-	(D)	-
	Value added in mining..mil.dol..	13.2	13.2	(D)	-	(D)	-	12.1	-	12.1	-	-	(D)	-
1453	Fire clay:													
	Establishments.....number..	99	99	81	2	79	-	17	1	16	-	-	1	-
	Employees.....1,000..	.8	.8	(D)	(D)	.4	-	.3	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	18.5	18.5	(D)	(D)	13.3	-	4.6	(D)	(D)	-	-	(D)	-
1454	Fuller's earth:													
	Establishments.....number..	16	16	1	-	1	-	15	-	15	-	-	-	-
	Employees.....1,000..	1.1	1.1	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	15.6	15.6	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
1455	Kaolin and ball clay:													
	Establishments.....number..	63	58	14	-	13	1	37	1	36	-	-	7	5
	Employees.....1,000..	3.7	(D)	.2	-	(D)	(D)	(D)	(D)	3.2	-	-	(D)	(D)
	Value added in mining..mil.dol..	65.1	(D)	2.5	-	(D)	(D)	(D)	(D)	61.9	-	-	(D)	(D)
1456	Feldspar:													
	Establishments.....number..	17	17	5	-	5	-	11	-	11	-	-	1	-
	Employees.....1,000..	.5	.5	(D)	-	(D)	-	.4	-	.4	-	-	(D)	-
	Value added in mining..mil.dol..	6.6	6.6	(D)	-	(D)	-	6.4	-	6.4	-	-	(D)	-
1459	Clay and related minerals, n.e.c.:													
	Establishments.....number..	129	128	67	3	63	1	61	-	60	1	-	-	1
	Employees.....1,000..	2.3	(D)	(D)	(D)	.2	(D)	2.0	-	(D)	(D)	-	-	(D)
	Value added in mining..mil.dol..	35.7	(D)	(D)	(D)	3.0	(D)	31.9	-	(D)	(D)	-	-	(D)

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments											Nonpro- ducing estab- lish- ments
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants	Undis- tributed	
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods			
14	1967-Continued													
147	Nonmetallic minerals, except fuels-Continued													
	Chemical and fertilizer minerals:													
	Establishments.....number..	233	224	62	15	36	11	108	33	58	17	23	31	9
	Employees.....1,000..	23.8	23.7	3.0	(D)	.4	(D)	16.3	6.8	6.8	2.7	(D)	(D)	.1
	Value added in mining..mil.dol..	740.7	729.8	261.3	(D)	6.1	(D)	428.2	157.6	208.7	62.0	(D)	(D)	10.9
1472	Barite:													
	Establishments.....number..	30	30	12	-	12	-	18	1	16	1	-	-	-
	Employees.....1,000..	.9	.9	(D)	-	(D)	-	(D)	(D)	.7	(D)	-	-	-
	Value added in mining..mil.dol..	15.3	15.3	(D)	-	(D)	-	(D)	(D)	11.3	(D)	-	-	-
1473	Fluorspar:													
	Establishments.....number..	32	32	12	12	-	-	11	7	4	-	6	3	-
	Employees.....1,000..	.7	.7	.1	.1	-	-	.4	.4	(2)	-	.2	(2)	-
	Value added in mining..mil.dol..	11.0	11.0	.3	.3	-	-	7.4	7.0	.5	-	3.3	-	-
1474	Potash, soda, and borate minerals:													
	Establishments.....number..	33	31	1	1	-	-	21	12	2	7	-	9	2
	Employees.....1,000..	7.9	(D)	(D)	(D)	-	-	(D)	4.6	(D)	(D)	-	.9	(D)
	Value added in mining..mil.dol..	187.7	(D)	(D)	(D)	-	-	(D)	93.4	(D)	(D)	-	-	(D)
1475	Phosphate rock:													
	Establishments.....number..	69	69	15	2	13	-	35	1	31	3	14	5	-
	Employees.....1,000..	8.1	8.1	(D)	(D)	.3	-	(D)	(D)	5.2	(D)	.7	(D)	-
	Value added in mining..mil.dol..	199.3	199.3	(D)	(D)	5.1	-	(D)	(D)	147.9	(D)	35.7	(D)	-
1476	Rock salt:													
	Establishments.....number..	26	26	4	-	4	-	17	11	2	4	1	4	-
	Employees.....1,000..	2.6	2.6	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	70.9	70.9	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	-
1477	Sulfur:													
	Establishments.....number..	31	25	13	-	2	11	2	-	-	2	-	10	6
	Employees.....1,000..	3.2	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	253.2	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-	(D)	(D)
1479	Chemical and fertilizer mining, n.e.c.:													
	Establishments.....number..	12	11	5	-	5	-	4	1	3	-	2	-	1
	Employees.....1,000..	.3	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	-	(D)
	Value added in mining..mil.dol..	3.4	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	-	(D)
1481	Nonmetallic minerals services:													
	Establishments.....number..	106	106	-	-	-	-	-	-	-	-	-	106	-
	Employees.....1,000..	.8	.8	-	-	-	-	-	-	-	-	-	.8	-
	Value added in mining..mil.dol..	11.2	11.2	-	-	-	-	-	-	-	-	-	11.2	-
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	378	376	121	21	98	2	232	20	202	10	2	21	2
	Employees.....1,000..	6.5	(D)	.8	(D)	.4	(D)	5.3	(D)	3.9	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	111.2	(D)	9.8	(D)	4.6	(D)	98.4	(D)	74.1	(D)	(D)	(D)	(D)
1492	Gypsum:													
	Establishments.....number..	33	32	15	1	14	-	16	-	16	-	-	1	1
	Employees.....1,000..	.4	(D)	(D)	(D)	(D)	-	.3	-	.3	-	-	(2)	(D)
	Value added in mining..mil.dol..	7.4	(D)	(D)	(D)	(D)	-	5.9	-	5.9	-	-	-	(D)
1493	Mica:													
	Establishments.....number..	20	20	5	-	5	-	13	-	13	-	1	1	-
	Employees.....1,000..	.3	.3	(D)	-	(D)	-	.3	-	.3	-	(D)	(D)	-
	Value added in mining..mil.dol..	5.4	5.4	(D)	-	(D)	-	5.2	-	5.2	-	(D)	(D)	-
1494	Native asphalt and bitumens:													
	Establishments.....number..	12	12	1	1	-	-	9	3	6	-	-	2	-
	Employees.....1,000..	.5	.5	(D)	(D)	-	-	(D)	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	5.8	5.8	(D)	(D)	-	-	(D)	(D)	(D)	-	-	(D)	-

See footnotes at end of table.

TABLE 1. Selected Statistics for Major Industry Groups 1967 and 1963, and Industries 1967—Continued

Code	Industry group, industry, and year	All types of estab- lishments, total	Producing establishments										Nonpro- ducing estab- lishments	
			Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants		Undis- tributed
				Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods	Total	Under- ground mines	Open- pit mines	Combina- tion methods, well opera- tions, and other methods			
	1967-Continued													
14	Nonmetallic minerals, except fuels-Continued													
1495	Pumice and pumicite:													
	Establishments.....number..	29	29	5	-	5	-	23	-	23	-	1	-	-
	Employees.....1,000..	.2	.2	(D)	-	(D)	-	.2	-	.2	-	(D)	-	-
	Value added in mining..mil.dol..	2.0	2.0	(D)	-	(D)	-	1.9	-	1.9	-	(D)	-	-
1496	Talc, soapstone, and pyrophyllite:													
	Establishments.....number..	53	53	27	15	12	-	24	13	10	1	-	2	-
	Employees.....1,000..	1.2	1.2	(D)	.1	(D)	-	(D)	.6	.4	(D)	-	(D)	-
	Value added in mining..mil.dol..	16.9	16.9	(D)	2.3	(D)	-	(D)	9.0	4.7	(D)	-	(D)	-
1497	Natural abrasives, except sand:													
	Establishments.....number..	20	20	9	-	9	-	9	2	7	-	-	2	-
	Employees.....1,000..	.3	.3	(D)	-	(D)	-	.3	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	4.3	4.3	(D)	-	(D)	-	4.0	(D)	(D)	-	-	(D)	-
1498	Peat:													
	Establishments.....number..	76	76	51	-	50	1	25	-	23	2	-	-	-
	Employees.....1,000..	.5	.5	(D)	-	(D)	(D)	(D)	-	.3	(D)	-	-	-
	Value added in mining..mil.dol..	6.7	6.7	(D)	-	(D)	(D)	(D)	-	4.6	(D)	-	-	-
1499	Nonmetallic minerals, n.e.c.:													
	Establishments.....number..	135	134	8	4	3	1	113	2	104	7	-	13	1
	Employees.....1,000..	2.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.9	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	62.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	45.8	(D)	-	(D)	(D)

Standard notes: - Represents zero. (X) Not applicable. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. (Z) Less than \$50 thousand.

TABLE 2. Selected Statistics for Industries by Geographic Areas: 1967

Geographic area and item	All types of establishments, total	Producing establishments											Nonproducing establishments	
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed		
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods				
United States:														
Establishments.....number..	28,579	28,031	9,294	3,200	1,151	4,943	5,185	731	4,005	449	977	12,575	548	
Employees.....1,000..	567.3	564.5	143.7	35.9	14.2	93.4	227.8	99.2	111.3	17.4	21.7	171.0	2.9	
Value added in mining..mil.dol..	19,330.2	19,359.1	11,880.1	426.9	304.0	11,149.2	4,516.6	1,655.1	2,527.6	334.2	1,147.3	1,815.1	-29.0	
Northeast Region:														
Establishments.....number..	2,944	2,910	1,075	661	266	148	813	123	625	65	89	933	34	
Employees.....1,000..	58.4	58.4	12.7	7.6	2.7	2.3	34.6	17.4	15.7	1.5	1.7	9.2	.1	
Value added in mining..mil.dol..	842.5	840.4	189.9	91.7	38.2	59.8	590.9	282.8	271.4	36.6	23.5	35.7	2.3	
New England Division:														
Establishments.....number..	298	291	43	-	42	1	136	3	130	3	4	108	7	
Employees.....1,000..	4.0	3.9	.5	-	(D)	(D)	2.3	(D)	2.1	(D)	.1	1.0	.1	
Value added in mining..mil.dol..	51.4	49.8	5.7	-	(D)	(D)	35.7	(D)	32.4	(D)	1.1	7.3	1.7	
Maine:														
Establishments.....number..	34	32	9	-	9	-	11	-	10	1	-	12	2	
Employees.....1,000..	.3	(D)	(D)	-	(D)	-	.1	-	(D)	(D)	-	(D)	(D)	
Value added in mining..mil.dol..	3.0	(D)	(D)	-	(D)	-	1.5	-	(D)	(D)	-	(D)	(D)	
New Hampshire:														
Establishments.....number..	26	26	4	-	4	-	11	-	10	1	1	10	-	
Employees.....1,000..	.2	.2	(D)	-	(D)	-	.1	-	(D)	(D)	(D)	.1	-	
Value added in mining..mil.dol..	3.3	3.3	(D)	-	(D)	-	1.6	-	(D)	(D)	(D)	1.3	-	
Vermont:														
Establishments.....number..	36	36	8	-	8	-	18	3	15	-	-	10	-	
Employees.....1,000..	.9	.9	(D)	-	(D)	-	.5	(D)	(D)	-	-	(D)	-	
Value added in mining..mil.dol..	11.7	11.7	(D)	-	(D)	-	7.1	(D)	(D)	-	-	(D)	-	
Massachusetts:														
Establishments.....number..	111	108	10	-	10	-	57	-	56	1	3	38	3	
Employees.....1,000..	1.3	(D)	.1	-	.1	-	.9	-	(D)	(D)	(D)	.3	(D)	
Value added in mining..mil.dol..	17.0	(D)	1.0	-	1.0	-	13.5	-	(D)	(D)	(D)	1.6	(D)	
Rhode Island:														
Establishments.....number..	22	21	1	-	1	-	11	-	11	-	-	9	1	
Employees.....1,000..	.3	(D)	(D)	-	(D)	-	.2	-	.2	-	-	(D)	(D)	
Value added in mining..mil.dol..	3.3	(D)	(D)	-	(D)	-	2.5	-	2.5	-	-	(D)	(D)	
Connecticut:														
Establishments.....number..	69	68	11	-	10	1	28	-	28	-	-	29	1	
Employees.....1,000..	1.0	(D)	(D)	-	(D)	(D)	.4	-	.4	-	-	.5	(D)	
Value added in mining..mil.dol..	13.1	(D)	(D)	-	(D)	(D)	9.6	-	9.6	-	-	2.5	(D)	
Middle Atlantic Division:														
Establishments.....number..	2,646	2,619	1,032	661	224	147	677	120	495	62	85	825	27	
Employees.....1,000..	54.3	54.5	12.3	7.6	(D)	(D)	32.3	(D)	13.6	(D)	1.7	8.2	.1	
Value added in mining..mil.dol..	791.1	790.6	184.2	91.7	(D)	(D)	555.2	(D)	239.0	(D)	22.4	28.4	.6	
New York:														
Establishments.....number..	467	460	64	3	34	27	174	10	155	9	3	219	7	
Employees.....1,000..	9.1	(D)	(D)	(D)	(D)	(D)	5.6	(D)	3.8	(D)	(D)	3.0	(D)	
Value added in mining..mil.dol..	137.5	(D)	(D)	(D)	(D)	(D)	115.7	(D)	74.9	(D)	(D)	11.3	(D)	
New Jersey:														
Establishments.....number..	138	135	19	-	19	-	69	2	61	6	5	42	3	
Employees.....1,000..	2.9	(D)	(D)	-	(D)	-	2.3	(D)	2.0	(D)	(D)	.4	(D)	
Value added in mining..mil.dol..	50.6	(D)	(D)	-	(D)	-	45.7	(D)	41.6	(D)	(D)	1.4	(D)	
Pennsylvania:														
Establishments.....number..	2,041	2,024	949	658	171	120	434	108	279	47	77	564	17	
Employees.....1,000..	42.3	42.5	11.7	(D)	2.0	(D)	24.4	15.4	7.9	1.0	1.5	4.7	(2)	
Value added in mining..mil.dol..	603.0	602.5	173.0	(D)	28.2	(D)	393.8	239.1	122.5	32.3	19.5	15.7	.6	

See footnotes at end of table.

TABLE 2. Selected Statistics for Industries by Geographic Areas: 1967—Continued

Geographic area and item	All types of establishments, total	Producing establishments											Non-producing establishments	
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed		
			Total	Under-ground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Under-ground mines	Open-pit mines	Combination methods, well operations, and other methods				
North Central Region:														
Establishments.....number..	5,812	5,753	1,317	203	335	779	1,760	108	1,525	127	89	2,587	59	
Employees.....1,000..	100.5	100.2	19.0	4.3	4.6	10.3	57.4	16.0	38.6	2.8	2.9	21.0	.3	
Value added in mining..mil.dol..	2,349.8	2,353.1	741.3	63.6	82.4	595.4	1,275.1	245.4	976.5	53.3	151.5	185.1	-3.4	
East North Central Division:														
Establishments.....number..	3,349	3,319	724	168	192	364	1,061	73	919	69	49	1,485	30	
Employees.....1,000..	59.6	59.4	10.9	4.1	1.9	4.9	35.5	10.8	22.8	2.0	1.1	11.9	.2	
Value added in mining..mil.dol..	1,212.2	1,212.0	312.9	61.1	40.5	211.3	776.9	185.1	549.2	42.6	27.1	95.1	.2	
Ohio:														
Establishments.....number..	1,195	1,179	299	110	92	97	333	23	274	36	15	532	16	
Employees.....1,000..	17.8	17.8	3.4	1.1	1.1	1.1	9.9	3.1	5.6	1.2	.3	4.2	.1	
Value added in mining..mil.dol..	281.4	281.4	66.7	14.4	27.9	24.4	178.8	55.7	97.8	25.4	5.7	30.1	(Z)	
Indiana:														
Establishments.....number..	497	496	130	26	29	75	162	5	146	11	3	201	1	
Employees.....1,000..	6.5	(D)	1.1	.3	(D)	(D)	4.2	.4	3.7	.1	(D)	1.2	(D)	
Value added in mining..mil.dol..	134.6	(D)	22.8	2.7	(D)	(D)	104.2	6.3	95.9	2.0	(D)	7.4	(D)	
Illinois:														
Establishments.....number..	962	955	185	18	21	146	292	40	238	14	9	469	7	
Employees.....1,000..	20.7	(D)	3.4	.4	.1	2.9	12.7	5.4	7.0	.3	(D)	4.4	(D)	
Value added in mining..mil.dol..	468.5	(D)	144.4	4.2	1.4	138.8	284.1	92.4	182.2	9.6	(D)	36.1	(D)	
Michigan:														
Establishments.....number..	459	454	83	8	29	46	135	4	124	7	15	221	5	
Employees.....1,000..	12.2	12.2	3.0	2.2	(D)	(D)	6.9	(D)	(D)	.2	.5	1.8	(Z)	
Value added in mining..mil.dol..	289.9	290.2	76.9	39.0	(D)	(D)	179.0	(D)	(D)	5.6	15.6	18.7	-3.3	
Wisconsin:														
Establishments.....number..	236	235	27	6	21	-	139	1	137	1	7	62	1	
Employees.....1,000..	2.4	(D)	.2	(Z)	.1	-	1.9	(D)	(D)	(D)	(D)	.2	(D)	
Value added in mining..mil.dol..	37.8	(D)	2.1	.8	1.3	-	30.8	(D)	(D)	(D)	(D)	2.8	(D)	
West North Central Division:														
Establishments.....number..	2,463	2,434	593	35	143	415	699	35	606	58	40	1,102	29	
Employees.....1,000..	40.9	40.8	8.1	.2	2.7	5.4	21.9	5.2	15.8	.8	1.8	9.1	.1	
Value added in mining..mil.dol..	1,137.6	1,141.1	428.4	2.5	41.9	384.1	498.2	60.3	427.3	10.7	124.4	90.0	-3.6	
Minnesota:														
Establishments.....number..	226	225	26	1	25	-	121	-	118	3	6	72	1	
Employees.....1,000..	12.9	(D)	2.1	(D)	(D)	-	8.5	-	(D)	(D)	(D)	.9	(D)	
Value added in mining..mil.dol..	415.0	(D)	30.4	(D)	(D)	-	311.2	-	(D)	(D)	(D)	3.4	(D)	
Iowa														
Establishments.....number..	240	240	28	11	17	-	166	8	148	10	2	44	-	
Employees.....1,000..	2.8	2.8	.2	(Z)	.1	-	2.4	(D)	2.1	(D)	(D)	(D)	-	
Value added in mining..mil.dol..	43.6	43.6	2.1	.5	1.6	-	39.8	(D)	35.5	(D)	(D)	(D)	-	
Missouri:														
Establishments.....number..	381	371	62	13	44	5	204	21	168	15	1	104	10	
Employees.....1,000..	8.9	8.8	.3	(Z)	.2	(Z)	6.2	3.0	3.0	.2	(D)	(D)	.1	
Value added in mining..mil.dol..	103.6	106.6	8.9	.2	8.2	.6	87.6	39.6	45.0	3.0	(D)	(D)	-3.0	
North Dakota:														
Establishments.....number..	166	161	67	-	21	46	24	-	23	1	4	66	5	
Employees.....1,000..	1.9	1.9	.5	-	.1	.4	.4	-	(D)	(D)	.1	.9	(Z)	
Value added in mining..mil.dol..	76.9	76.8	52.2	-	.9	51.3	7.2	-	(D)	(D)	6.7	10.7	.1	
South Dakota:														
Establishments.....number..	81	76	15	4	8	3	23	1	19	3	2	36	5	
Employees.....1,000..	2.2	(D)	.1	(D)	(Z)	(D)	2.1	(D)	(D)	(D)	(D)	.1	(D)	
Value added in mining..mil.dol..	23.6	(D)	.8	(D)	.4	(D)	22.5	(D)	(D)	(D)	(D)	.6	(D)	
Nebraska:														
Establishments.....number..	254	252	64	-	11	53	66	-	56	10	6	116	2	
Employees.....1,000..	1.6	(D)	.3	-	(D)	(D)	.7	-	.3	.2	(D)	.6	(D)	
Value added in mining..mil.dol..	43.1	(D)	24.0	-	(D)	(D)	8.5	-	7.2	1.3	(D)	7.5	(D)	
Kansas:														
Establishments.....number..	1,115	1,109	331	6	17	308	95	5	74	16	19	664	6	
Employees.....1,000..	10.6	10.6	4.8	(Z)	.1	4.7	1.2	.2	.9	.2	(D)	(D)	(Z)	
Value added in mining..mil.dol..	431.8	432.0	310.1	.4	.8	308.9	21.4	2.6	15.4	3.3	(D)	(D)	-3.3	

See footnotes at end of table.

TABLE 2. Selected Statistics for Industries by Geographic Areas: 1967—Continued

Geographic area and item	All types of establishments, total	Producing establishments										Separately operated preparation plants	Undistributed	Non-producing establishments
		Total	Mines only				Mines with preparation plants							
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods				
South Region:														
Establishments.....number..	15,072	14,835	5,467	1,945	269	3,253	1,696	373	1,142	181	629	7,043	237	
Employees.....1,000..	300.1	298.9	84.6	20.4	2.9	61.2	91.8	45.5	36.2	10.0	12.2	110.1	1.2	
Value added in mining..mil.dol..	12,284.0	12,289.8	8,687.8	213.2	64.8	8,410.1	1,608.8	753.4	679.8	175.7	825.4	1,167.8	-5.9	
South Atlantic Division:														
Establishments.....number..	3,259	3,209	1,441	1,148	128	165	838	236	532	70	79	851	50	
Employees.....1,000..	80.2	80.0	16.3	12.3	1.2	2.8	56.3	29.9	20.7	5.7	2.0	5.1	.2	
Value added in mining..mil.dol..	1,335.1	1,337.0	227.5	133.2	16.2	78.2	986.7	513.1	391.8	81.8	79.9	43.0	-1.8	
Delaware, Maryland, and District of Columbia:														
Establishments.....number..	153	151	47	28	17	2	67	3	57	7	5	32	2	
Employees.....1,000..	2.2	(D)	.3	(D)-	(D)	(D)	1.5	(D)	1.2	(D)	(D)	.4	(D)	
Value added in mining..mil.dol..	35.3	(D)	3.8	(D)	(D)	(D)	28.6	(D)	23.6	(D)	(D)	2.6	(D)	
Virginia:														
Establishments.....number..	737	730	498	462	18	18	172	48	109	15	19	41	7	
Employees.....1,000..	13.0	13.0	4.4	4.1	.2	.2	7.7	4.1	3.0	.6	.3	.6	.1	
Value added in mining..mil.dol..	178.5	178.5	43.5	37.8	2.6	3.2	124.6	72.4	42.0	10.2	5.5	5.0	(Z)	
West Virginia:														
Establishments.....number..	1,780	1,758	820	655	23	142	256	176	44	36	36	646	22	
Employees.....1,000..	45.6	45.5	11.0	8.0	.4	2.6	30.7	25.8	1.1	3.9	.7	3.0	.1	
Value added in mining..mil.dol..	744.4	744.4	171.5	93.4	6.6	71.5	510.4	432.0	17.1	61.3	32.5	29.9	(Z)	
North Carolina:														
Establishments.....number..	161	157	19	-	19	-	114	3	107	4	2	22	4	
Employees.....1,000..	3.5	(D)	.1	-	.1	-	3.1	(D)	2.9	(D)	(D)	(D)	(D)	
Value added in mining..mil.dol..	46.7	(D)	.9	-	.9	-	45.1	(D)	43.3	(D)	(D)	(D)	(D)	
South Carolina:														
Establishments.....number..	59	58	7	1	6	-	35	1	32	2	3	13	1	
Employees.....1,000..	1.6	(D)	.1	(D)	(D)	-	1.4	(D)	(D)	(D)	(D)	(D)	(D)	
Value added in mining..mil.dol..	21.5	(D)	1.2	(D)	(D)	-	18.6	(D)	(D)	(D)	(D)	(D)	(D)	
Georgia:														
Establishments.....number..	159	153	36	-	36	-	88	5	82	1	3	26	6	
Employees.....1,000..	6.2	6.2	.2	-	.2	-	5.7	.4	(D)	(D)	(D)	(D)	(Z)	
Value added in mining..mil.dol..	106.4	106.4	2.5	-	2.5	-	100.6	6.0	(D)	(D)	(D)	(D)	(Z)	
Florida:														
Establishments.....number..	210	202	14	2	9	3	107	-	102	5	11	70	8	
Employees.....1,000..	8.1	8.1	.1	(D)	(D)	(D)	6.7	-	6.4	.2	.7	.6	(Z)	
Value added in mining..mil.dol..	202.3	204.2	4.1	(D)	(D)	(D)	158.8	-	153.4	5.4	37.7	3.5	-1.9	
East South Central Division:														
Establishments.....number..	2,220	2,188	1,047	762	86	199	521	129	331	61	54	566	32	
Employees.....1,000..	43.7	43.6	12.3	7.7	1.3	3.3	26.0	15.0	8.4	2.5	.8	4.6	.1	
Value added in mining..mil.dol..	859.9	860.3	329.6	76.3	33.4	220.0	457.6	224.3	178.8	54.6	19.4	53.5	-5.5	
Kentucky:														
Establishments.....number..	1,267	1,256	702	585	14	103	233	88	113	32	34	287	11	
Employees.....1,000..	24.6	24.6	8.7	6.4	.3	2.0	13.8	9.1	3.3	1.3	.6	1.5	.1	
Value added in mining..mil.dol..	403.0	403.2	135.0	62.9	17.4	54.7	238.2	118.9	82.7	36.6	15.5	14.4	-2.2	
Tennessee:														
Establishments.....number..	352	345	130	98	28	4	163	30	124	9	10	42	7	
Employees.....1,000..	6.9	6.9	1.2	.8	.3	.1	5.4	2.6	2.6	.2	(D)	(D)	(Z)	
Value added in mining..mil.dol..	116.2	116.2	15.7	9.4	5.5	.8	97.0	40.1	54.8	2.1	(D)	(D)	-1.1	
Alabama:														
Establishments.....number..	294	287	126	77	37	12	98	12	72	14	3	60	7	
Employees.....1,000..	7.9	7.9	(D)	.5	(D)	(D)	(D)	3.4	2.0	(D)	(D)	(D)	(Z)	
Value added in mining..mil.dol..	151.1	151.2	(D)	4.0	(D)	(D)	(D)	65.3	33.7	(D)	(D)	(D)	-1.1	
Mississippi:														
Establishments.....number..	307	299	88	-	8	80	27	-	22	5	6	178	8	
Employees.....1,000..	4.3	4.2	(D)	-	(D)	(D)	(D)	-	.5	(D)	(D)	2.2	.1	
Value added in mining..mil.dol..	189.6	189.7	(D)	-	(D)	(D)	(D)	-	7.6	(D)	(D)	30.7	-1.1	

See footnotes at end of table.

TABLE 2. Selected Statistics for Industries by Geographic Areas: 1967—Continued

Geographic area and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods			
South Region-Continued													
West South Central Division:													
Establishments.....number..	9,593	943.8	2,979	35	55	2,889	337	8	279	50	496	5,626	155
Employees.....1,000..	176.2	175.3	56.0	.4	.4	55.2	9.5	.6	7.1	1.8	9.4	100.4	.9
Value added in mining..mil.dol..	10,089.0	10,092.5	8,130.7	3.7	15.2	8,111.9	164.5	16.0	109.2	39.3	726.1	1,071.3	-3.6
Arkansas:													
Establishments.....number..	306	297	98	7	12	79	58	3	47	8	6	135	9
Employees.....1,000..	4.1	4.0	1.1	(D)	.2	(D)	1.8	(D)	1.4	(D)	.1	.9	.1
Value added in mining..mil.dol..	129.7	130.0	86.2	(D)	11.7	(D)	27.6	(D)	21.2	(D)	2.7	13.6	-.3
Louisiana:													
Establishments.....number..	1,382	1,338	353	-	2	351	51	3	36	12	95	839	44
Employees.....1,000..	46.5	46.3	15.6	-	(D)	(D)	2.2	(D)	1.0	(D)	1.5	27.0	.2
Value added in mining..mil.dol..	3,983.3	3,978.2	3,381.9	-	(D)	(D)	49.8	(D)	15.1	(D)	153.7	392.8	5.1
Oklahoma:													
Establishments.....number..	1,782	1,771	482	22	4	456	55	1	44	10	81	1,153	11
Employees.....1,000..	30.1	30.1	10.5	(D)	(D)	10.4	1.1	(D)	.9	(D)	1.3	17.2	(Z)
Value added in mining..mil.dol..	985.1	983.9	741.5	(D)	(D)	739.4	16.7	(D)	14.5	(D)	89.2	136.5	1.2
Texas:													
Establishments.....number..	6,123	6,032	2,046	6	37	2,003	173	1	152	20	314	3,499	91
Employees.....1,000..	95.5	94.9	28.8	.2	.2	28.4	4.4	(D)	3.8	(D)	6.4	55.3	.6
Value added in mining..mil.dol..	4,990.9	5,000.4	3,921.1	1.5	3.0	3,916.6	70.4	(D)	58.4	(D)	480.5	528.4	-9.6
West Region:													
Establishments.....number..	4,751	4,533	1,435	391	281	763	916	127	713	76	170	2,012	218
Employees.....1,000..	108.4	107.0	27.4	3.7	4.0	19.8	44.1	20.3	20.8	3.1	4.9	30.6	1.3
Value added in mining..mil.dol..	3,853.9	3,875.8	2,260.8	58.4	118.6	2,083.9	1,041.8	373.4	599.9	68.6	146.9	426.5	-22.0
Mountain Division:													
Establishments.....number..	2,830	2,695	1,003	322	164	517	402	109	268	25	100	1,190	135
Employees.....1,000..	68.0	67.1	16.0	3.5	3.4	9.1	31.8	19.2	11.9	.8	4.0	15.3	.8
Value added in mining..mil.dol..	2,234.6	2,248.4	1,225.5	55.8	103.8	1,065.9	736.2	352.7	361.1	22.5	105.8	180.8	-13.8
Montana:													
Establishments.....number..	311	293	96	28	12	56	31	7	22	2	10	156	18
Employees.....1,000..	5.5	5.4	2.7	.3	(Z)	2.4	.7	(D)	(D)	(D)	.4	1.5	(Z)
Value added in mining..mil.dol..	129.2	129.9	98.1	3.7	.4	93.9	9.0	(D)	(D)	(D)	5.1	17.7	-.7
Idaho:													
Establishments.....number..	97	91	37	22	15	-	34	12	20	2	3	17	6
Employees.....1,000..	3.1	3.1	.3	.1	.2	-	2.5	2.1	(D)	(D)	(D)	.3	(Z)
Value added in mining..mil.dol..	48.1	48.1	3.0	.3	2.7	-	41.4	31.7	(D)	(D)	(D)	1.8	(Z)
Wyoming:													
Establishments.....number..	447	431	129	15	7	107	41	9	29	3	19	242	16
Employees.....1,000..	8.7	8.5	2.0	(D)	(D)	(D)	2.9	(D)	1.4	(D)	.3	3.4	.2
Value added in mining..mil.dol..	501.8	504.4	361.0	(D)	(D)	(D)	89.4	(D)	38.2	(D)	9.0	45.0	-2.6
Colorado:													
Establishments.....number..	648	620	257	125	35	97	96	32	56	8	17	250	28
Employees.....1,000..	12.0	11.8	2.2	.6	.1	1.5	6.6	5.9	.7	(Z)	.3	2.8	.2
Value added in mining..mil.dol..	251.4	251.4	102.6	8.7	2.0	91.8	119.5	105.3	13.4	.8	5.3	24.0	(Z)
New Mexico:													
Establishments.....number..	690	682	259	29	15	215	43	12	28	3	38	342	8
Employees.....1,000..	16.6	16.4	3.9	.6	.5	2.9	6.3	(D)	1.0	(D)	1.3	4.9	.1
Value added in mining..mil.dol..	718.8	733.0	475.0	15.0	17.6	442.4	143.6	(D)	33.7	(D)	45.8	68.6	-14.2
Arizona:													
Establishments.....number..	198	179	58	17	34	7	56	10	40	6	2	63	19
Employees.....1,000..	10.7	10.6	1.2	.6	.5	(Z)	8.4	2.3	6.0	.1	(D)	(D)	.1
Value added in mining..mil.dol..	296.7	298.1	43.2	9.2	24.7	9.3	244.5	31.7	211.1	1.7	(D)	(D)	-1.4
Utah:													
Establishments.....number..	308	283	125	70	22	33	57	23	33	1	10	91	25
Employees.....1,000..	8.5	8.5	3.2	1.1	1.6	.4	2.7	(D)	.5	(D)	1.2	1.4	.1
Value added in mining..mil.dol..	233.7	227.7	133.8	17.2	47.6	68.9	49.7	(D)	13.3	(D)	30.0	14.3	6.0
Nevada:													
Establishments.....number..	131	116	42	16	24	2	44	4	40	-	1	29	15
Employees.....1,000..	2.9	2.8	.5	(D)	(D)	(D)	1.7	.1	1.6	-	(D)	(D)	.1
Value added in mining..mil.dol..	54.9	55.8	8.9	(D)	(D)	(D)	39.1	1.7	37.4	-	(D)	(D)	-.9

See footnotes at end of table.

TABLE 2. Selected Statistics for Industries by Geographic Areas: 1967—Continued

Geographic area and item	All types of establishments, total	Producing establishments											Non-producing establishments
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed	
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods			
West Region-Continued													
Pacific Division:													
Establishments.....number..	1,921	1,838	432	69	117	246	514	18	445	51	70	822	83
Employees.....1,000..	40.4	39.9	11.4	.2	.6	10.7	12.3	1.1	8.9	2.3	.9	15.3	.5
Value added in mining..mil.dol..	1,619.3	1,627.4	1,035.3	2.6	14.8	1,018.0	305.6	20.7	238.8	46.1	41.1	245.7	-8.2
Washington:													
Establishments.....number..	185	172	43	15	28	-	79	5	68	6	1	49	13
Employees.....1,000..	1.6	1.5	.1	(Z)	.1	-	1.0	(D)	.5	(D)	(D)	(D)	.1
Value added in mining..mil.dol..	21.3	21.4	1.7	.2	1.5	-	16.4	(D)	11.0	(D)	(D)	(D)	-.2
Oregon:													
Establishments.....number..	160	150	16	5	11	-	100	1	87	12	4	30	10
Employees.....1,000..	1.4	1.4	.1	(D)	(D)	-	1.1	(D)	.8	(D)	(D)	(D)	(Z)
Value added in mining..mil.dol..	27.3	27.1	7.1	(D)	(D)	-	17.5	(D)	11.9	(D)	(D)	(D)	.2
California:													
Establishments.....number..	1,438	1,405	354	41	72	241	303	12	258	33	63	685	33
Employees.....1,000..	35.0	34.9	11.0	(D)	.4	(D)	9.8	.8	7.1	1.9	.9	13.2	.1
Value added in mining..mil.dol..	1,342.2	1,342.0	904.7	(D)	6.0	(D)	260.2	16.2	204.4	39.6	40.7	136.6	.2
Alaska:													
Establishments.....number..	126	99	15	8	2	5	25	-	25	-	1	58	27
Employees.....1,000..	2.2	1.9	(D)	(Z)	(D)	(D)	.2	-	.2	-	(D)	1.6	.3
Value added in mining..mil.dol..	223.5	231.9	(D)	(Z)	(D)	(D)	6.6	-	6.6	-	(D)	103.7	-8.4
Hawaii:													
Establishments.....number..	12	12	4	-	4	-	7	-	7	-	1	-	-
Employees.....1,000..	.2	.2	(D)	-	(D)	-	.2	-	.2	-	(D)	-	-
Value added in mining..mil.dol..	5.0	5.0	(D)	-	(D)	-	4.9	-	4.9	-	(D)	-	-

Standard notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(Z) Less than 50 employees.

TABLE 3. General Statistics for Nonproducing Establishments, by Industry Groups and Industries:
1967 and 1963

Ind Code	Industry group and Industry	1967								1963	
		Establishments		All employees		Production, development and exploration workers			Capital expenditure	All employees	Capital expenditure
		Total	With 20 or more employees	Total	Payroll	Total	Man-hours	Wages			
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	All mineral industries										
10	All mining industries.....	548	28	2.9	23.9	2.0	4.0	12.5	230.2	4.8	140.0
	Metal mining.....	106	12	1.0	8.1	.9	1.9	6.1	68.2	2.0	61.1
1011	Iron ores.....	6	-	(Z)	.1	(Z)	(Z)	.1	.5	.8	51.7
1021	Copper ores.....	30	6	.4	3.2	.4	.7	2.4	15.9	.2	1.8
1031	Lead and zinc ores.....	19	4	.2	1.7	.1	.4	1.1	31.2	.2	.8
1092	Mercury ores.....	5	-	(Z)	.2	(Z)	(Z)	.2	.1	(NA)	(NA)
1094	Uranium-Radium-Vanadium ores.....	14	2	.3	2.3	.3	.6	1.7	19.8	.1	.8
1099	Metallic ores, n.e.c.....	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	.1	.1	.3
11	Anthracite mining.....	4	-	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	12.2
12	Bituminous coal and lignite mining.....	25	1	.2	1.2	.2	.3	.9	20.3	.1	
13	Oil and gas extraction.....	360	15	1.3	11.8	0.5	1.0	3.2	106.6	2.1	53.2
14	Nonmetallic minerals, except fuels.....	53	-	.4	2.9	.4	8	2.4	35.1	.6	13.4
1422	Crushed and broken limestone.....	13	-	.1	.3	.1	.1	.3	(Z)	.1	.3
1442	Construction sand and gravel.....	16	-	.1	.6	.1	.2	.5	1.7	.2	.4

Standard notes: - Represents zero. (NA) Not available. (Z) Less than one-half the specified unit of measure. n.e.c. Not elsewhere classified.



EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment

(quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts—The amounts shown as value of shipments for each industry are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include prepara-

tion from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each

product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The "costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.





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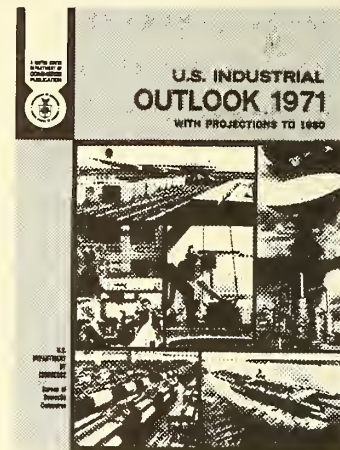
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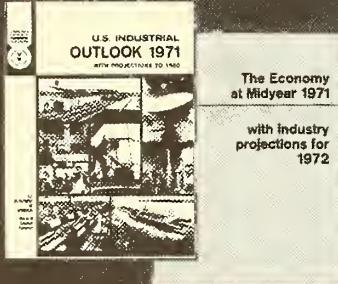
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METAL MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Major Group 10, Metal Mining. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1011--Iron Ores	MIC67(1)-10A
1021--Copper Ores	
1031--Lead and Zinc Ores	MIC67(1)-10B
1042--Lode Gold	
1043--Placer Gold	
1044--Silver Ores	
1051--Bauxite and Other Aluminum Ores	MIC67(1)-10C
1062--Manganese Ores	
1064--Tungsten Ores	
1069--Ferroalloy Ores except Vanadium, Not Elsewhere Classified	
1081--Metal Mining Services	MIC67(1)-10D
1092--Mercury Ores	
1093--Titanium Ores	
1094--Uranium-Radium-Vanadium Ores	
1099--Metallic Minerals (Ores), Not Elsewhere Classified	

In addition to the industries listed above, separate subindustry figures are presented for the Lead Ores and Zinc Ores subindustries and for service subindustries in which establishments are classified on the basis of the primary industry served.

INDUSTRY DESCRIPTIONS

The metal mining industries represent establishments primarily engaged in mining, developing mines, or exploring for metallic ores. These ores are valued chiefly for the metals they contain, recovered either for use as such or as constituents of alloys, chemicals, pigments, etc. This major group also includes all ore dressing and beneficiating operations whether performed at mills operated in conjunction with the mines served, or at mills, such as custom mills, operated separately. These mills include those which crush, grind, wash, dry, sinter, or leach ore, or perform gravity separation or flotation operations. Magnesite and brucite operations are classified in industry 1459, and dolomite operations in industry group 142. Smelters and refineries are classified in Major Group 33 — Primary Metal Industries, and establishments engaged in producing primary magnesium metal in Industry 3339. The operation of brine wells for the production of magnesium is classified in Major Group 28.

Exploration for metal ores by operators of the properties is included in this major group and establishments engaged only in such activities are classified according to type of ore expected to be found. Establishments primarily performing exploration on a contract, fee, or other basis are included in the metal mining services industry and classified by subindustry on the basis of the type of metal ore expected to be found.

SUMMARY OF FINDINGS

The combined value of shipments and receipts in 1967 of all industries in Major Group 10 was \$2,296.2 million. Establishments in the Iron Ores Industry accounted for \$953.4 million, the Copper Ores Industry for \$675.9 million, and the Miscellaneous Metal Ores Industry for \$267.1 million. These three industries accounted for more than 83 percent of the total value of shipments for the major group. Shipments of the Lead and Zinc Ores Industry amounted to \$151.1 million. The Gold and Silver Ores Industries had shipments and receipts of \$63.3 million; the Ferroalloy Ores Industry Group accounted for \$108.3 million; the Bauxite Industry accounted for \$28.8 million; and establishments primarily engaged in metal mining services reported receipts of \$48.3 million.

This report presents, in table 1, comparative general statistics for all metal mining industries combined for the census years 1860 to 1967. Table 2 presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. Table 3 shows number of establishments, employment, and value added in mining by major types of operation for the same geographic areas. In table 4, detailed statistics are presented for the United States by 4-digit industries and subindustries.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1967.....	¹ 1,155	318	70.9	552.4	55.4	113.9	396.1	1,556.6	1,079.4	2,296.2	339.8
1963.....	¹ 1,614	298	77.2	515.2	62.2	125.7	383.7	1,418.2	940.1	2,128.2	230.9
1958.....	2,351	386	91.6	486.2	70.8	136.2	355.0	1,180.2	861.1	1,826.2	215.1
1954.....	3,668	416	101.2	468.7	82.7	170.5	358.0	² 1,084.1	666.2	² 1,517.3	222.4
1939 ³	⁴ 2,095	(NA)	100.1	153.9	89.8	190.8	127.1	417.0	100.4	¹¹ 517.4	(NA)
1929 ⁵	1,799	(NA)	125.6	205.8	115.8	(NA)	178.3	496.3	162.9	¹¹ 633.8	(NA)
1919 ⁶	2,739	(NA)	149.1	238.7	138.2	(NA)	213.9	413.1	153.3	566.4	(NA)
1909 ⁷	7,834	(NA)	175.4	156.7	164.9	(NA)	142.0	266.7	123.0	389.8	(NA)
1902 ⁸	⁴ 7,730	(NA)	133.8	108.6	⁹ 123.2	(NA)	96.2	167.5	48.2	¹¹ 215.7	(NA)
1889.....	(NA)	(NA)	109.1	64.3	103.0	(NA)	58.4	131.1	¹² 26.7	¹¹ 157.7	(NA)
1880.....	⁴ 4,048	(NA)	65.9	28.3	62.6	(NA)	(NA)	¹⁰ 103.7	¹³ 9.3	¹¹ 115.1	(NA)
1870.....	2,969	(NA)	39.9	19.5	(NA)	(NA)	(NA)	41.2	6.0	¹¹ 47.2	(NA)
1860.....	7,462	(NA)	53.6	26.6	(NA)	(NA)	(NA)	36.8	17.8	54.6	(NA)

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

¹In 1967, for the first time data for single unit establishments without paid employees were excluded from the census. In 1963 there were 460 single unit establishments without paid employees in this major group. In 1963, for mining as a whole, establishments without paid employees accounted for approximately 3 percent of value added.

²Excludes figures for the Uranium-Radium-Vanadium Ores Industry.

³Excludes figures for Alaska.

⁴Represents number of mines.

⁵Except for number of establishments includes data for 27 nonproducing establishments in the Nonmetallic Minerals Mining Industries. See also footnote 3.

⁶Except for number of establishments, excludes figures for 1 chromite mine in Alaska.

⁷Except for number of operating companies and number of establishments, includes data for 2 producing and 18 nonproducing establishments in the nonmetallic minerals mining industries, for which separate figures were not available.

⁸For 1902, data were obtained from the operators of metal mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 8,527.

⁹Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

¹⁰Includes an estimated value added for the Placer Gold Industry.

¹¹Represents value of net shipments and receipts.

¹²Excludes data for the Manganese Ores Industry.

¹³Excludes costs for the Placer Gold Industry.

TABLE 2. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	United States, total.....	1,155	318	70.9	552.4	55.4	113.9	396.1	1,556.6	1,079.4	2,296.2	339.8	77.2	1,418.2
101	Iron ores.....	146	79	22.6	185.9	18.0	36.2	133.4	661.9	400.3	953.4	108.8	23.1	549.3
102	Copper ores.....	156	62	20.9	170.9	15.0	32.5	114.6	436.5	361.6	675.9	122.1	26.5	417.1
103	Lead and zinc ores.....	167	57	9.1	60.9	7.5	15.0	46.2	102.6	92.4	151.2	43.8	9.4	84.4
104	Gold and silver ores....	183	15	3.7	25.5	3.2	6.9	20.2	51.3	16.4	63.3	4.4	4.2	49.0
105	Bauxite and other aluminum ores.....	17	7	0.6	4.1	0.5	0.8	2.9	22.5	6.7	28.8	0.4	0.6	17.5
106	Ferroalloy ores, except vanadium.....	43	11	4.0	31.9	3.1	6.2	23.0	73.5	47.5	108.3	12.6	3.1	66.4
108	Metal mining services...	148	34	2.6	19.1	2.4	4.5	16.3	33.6	17.2	48.3	2.3	2.2	24.7
109	Miscellaneous metal ores	295	53	7.4	54.1	5.8	11.8	39.5	174.8	137.7	267.1	45.4	8.1	209.8
	GEOGRAPHIC AREA													
	Middle Atlantic Division:													
101	Iron ores.....	9	5	2.9	20.9	2.4	4.7	17.0	42.4	20.7	61.5	1.5	3.4	55.6
	New York.....	32	14	2.9	27.8	1.6	3.3	12.2	34.9	13.2	45.8	2.2	3.2	36.3
	East North Central Division....	56	36	7.9	64.1	5.8	11.6	42.1	171.0	125.4	258.9	37.5	7.6	109.3
101	Iron ores.....	29	22	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.7	87.7
103	Lead and zinc ores.....	11	5	0.2	1.3	0.2	0.4	1.0	4.2	(D)	6.8	(D)	2.9	21.0
	Michigan.....	33	28	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.7	99.7
	Wisconsin.....	9	4	0.1	0.9	0.1	0.3	0.8	3.1	3.0	4.9	1.3		5.5
	West North Central Division....	106	49	16.1	120.8	13.0	26.2	90.4	451.4	297.3	637.2	111.6	15.9	(D)
101	Iron ores.....	54	38	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	12.0	344.1
108	Metal mining services.....	21	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	2.9
	Minnesota.....	58	38	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	11.4	350.8
101	Iron ores.....	50	36	10.8	84.0	8.6	16.9	61.5	391.9	238.5	552.9	77.5	11.2	348.1
108	Metal mining services.....	6	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	2.7
	Missouri.....	28	10	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.5	9.6
103	Lead and zinc ores.....	9	6	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.7	13.0
	East South Central Division....	37	20	2.7	15.9	2.3	4.6	12.7	38.9	13.5	48.6	3.7	1.9	21.4
101	Iron ores.....	16	5	0.6	4.4	0.5	1.1	3.7	7.8	2.9	10.2	0.5	0.9	11.0
103	Lead and zinc ores.....	9	9	1.3	7.2	1.1	2.1	5.3	13.7	5.9	16.9	2.8	0.9	9.6
	Tennessee.....	13	11	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.9	10.0
103	Lead and zinc ores.....	9	9	1.3	7.2	1.1	2.1	5.3	13.7	5.9	16.9	2.8	0.9	9.6
	Alabama.....	21	9	0.7	4.9	0.6	1.3	4.1	9.1	4.2	12.5	0.8	1.0	11.5
	West South Central Division....	61	10	1.1	7.0	0.8	1.6	4.9	28.7	27.8	40.9	15.6	1.2	(D)
105	Bauxite and other aluminum ores.....	9	4	0.5	3.6	0.4	0.7	2.5	21.2	5.3	26.4	0.1	0.5	16.7
	Arkansas.....	13	5	0.7	4.7	0.5	0.9	3.2	21.0	(D)	26.6	(D)	0.5	(D)
105	Bauxite and other aluminum ores.....	9	4	0.5	3.6	0.4	0.7	2.5	21.2	5.3	26.4	0.1	0.5	16.7
	Oklahoma.....	19	2	0.2	1.3	0.2	0.3	0.9	2.7	3.8	6.2	0.3	0.3	(D)
	Texas.....	29	3	0.2	1.1	0.2	0.4	0.9	4.9	(D)	8.1	(D)	0.4	(D)
	Mountain Division.....	609	149	34.0	267.7	26.7	56.4	197.4	708.9	530.5	1,085.4	154.0	40.9	748.4
101	Iron ores.....	22	6	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.1	25.3
102	Copper, lead, zinc, gold, and silver ores.....													
103		285	80	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	29.3	464.0
104														
106	Ferroalloy ores, except vanadium.....	23	7	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.3	74.9
108	Metal mining services.....	78	22	1.7	12.5	1.5	2.9	10.0	18.7	11.6	28.6	1.7	17.7	
109	Miscellaneous metal ores....	201	34	5.3	40.0	4.1	8.5	28.9	140.4	99.2	214.1	25.6	6.5	184.1
	Montana.....	42	8	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.3	28.4
102	Copper ores.....	9	5	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.6	23.5
103	Lead and zinc ores.....	9	-	0.1	0.4	(Z)	0.1	0.3	0.7	0.5	1.0	0.2	0.5	3.7
	Idaho.....	55	15	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.8	31.4
103	Lead and zinc ores.....	22	7	1.3	9.9	1.1	2.2	8.2	17.3	7.4	23.3	1.4	1.7	14.2
104	Gold and silver ores.....	20	6	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	17.1
	Wyoming.....	33	13	1.9	13.6	1.6	3.3	10.7	45.9	27.0	61.8	11.1	1.8	51.5

See footnotes at end of table.

TABLE 2. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	GEOGRAPHIC AREA--Continued													
	Mountain Division--Continued													
104	Colorado.....	159	22	5.9	43.8	4.8	9.3	31.5	93.5	62.0	141.7	13.8	5.0	94.7
109	Gold and silver ores.....	19	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.1	1.1
	Miscellaneous metal ores..	94	10	1.6	11.6	1.2	2.4	7.8	33.8	28.0	56.5	5.4	1.7	30.1
	New Mexico.....	54	23	4.0	30.6	3.3	6.7	23.9	86.9	94.6	152.9	28.6	4.2	(³)
	Arizona.....	94	34	10.1	86.4	7.6	17.7	61.7	280.0	127.4	351.2	56.2	14.2	277.1
102	Copper ores.....	51	24	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	12.5	257.8
103	Lead and zinc ores.....	10	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.1	(NA)
108	Metal mining services....	14	3	0.4	2.4	0.3	0.7	2.1	3.7	3.0	6.3	0.3	1.0	12.2
	Utah.....	100	21	4.8	38.1	3.5	7.3	26.2	105.1	103.1	194.9	13.4	6.5	³ 237.1
101	Iron ores.....	5	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	11.1
103	Lead and zinc ores.....	21	6	1.0	7.0	0.8	1.7	5.3	7.5	13.9	20.5	0.9	1.1	12.0
	Nevada.....	72	13	2.1	16.7	1.7	3.7	13.2	38.5	39.5	65.3	12.8	2.1	28.1
101	Iron ores.....	9	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.2	2.6
104	Gold and silver ores.....	15	2	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.2	1.5
	Pacific Division.....	205	24	3.3	27.7	2.7	5.6	20.9	72.8	41.4	105.1	9.2	2.5	45.9
101	Iron ores.....	2	2	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.5	19.9
102	Copper ores.....	13	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		
103	Lead and zinc ores.....	15	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.1	11.8
104	Gold and silver ores.....	89	4	0.4	3.0	0.3	0.8	1.9	3.5	1.3	4.3	0.5		
106	Ferroalloy ores, except vanadium.....	9	3	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.5	6.2
108	Metal mining services.....	18	2	0.2	1.3	0.2	0.3	1.2	2.3	1.0	3.2	0.1	0.1	1.1
109	Miscellaneous metal ores...	59	8	0.7	5.1	0.6	1.3	4.1	11.5	7.1	15.4	3.2	0.4	8.0
	California.....	107	15	2.5	21.3	2.1	4.2	16.2	76.7	(D)	88.6	(D)	1.6	30.2
102	Copper lead, and zinc ores.....	7	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.4	3.1
103	Gold and silver ores.....	36	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		
104	Miscellaneous metal ores..	44	7	0.6	4.4	0.5	1.2	3.7	10.6	6.6	14.1	3.1	0.3	2.3
	Alaska.....	40	3	0.2	1.5	0.1	0.4	1.0	0.9	1.1	1.7	0.3	0.3	5.2

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (Z) Less than \$50 thousand or 50 employees.

¹Industry groups with less than 50 employees are omitted. They are included, however, in higher level totals. For industries and industry groups with 50 or more employees which cannot be shown because they would disclose figures for individual companies, the number of establishments is shown and the employment size range is indicated by one of the following symbols:

BB - 50-99 employees
CC - 100-249 employees

EE - 250-499 employees
FF - 500-999 employees

GG - 1,000-2,499 employees,
HH - 2,500 and over employees

²Includes figures for separately reported central offices and related facilities in Massachusetts.

³Figures for New Mexico are included with those for Utah.

TABLE 3. Selected Statistics For Industry Groups By Type Of Operations And Geographic Area:
1967

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ²
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	UNITED STATES													
	Establishments.....number..	1,155	1,049	517	347	167	3	266	82	174	10	47	219	106
	Employees.....1,000..	70.9	70.0	13.4	5.7	5.5	2.2	44.9	23.8	20.5	.6	4.9	6.7	1.0
	Value added in mining,mil.dol..	1,556.6	1,576.2	270.8	90.1	152.7	28.1	1,132.4	386.7	735.4	10.4	139.5	33.6	-19.7
101	Iron ores:													
	Establishments.....number..	146	140	53	8	45	-	60	7	52	1	10	17	6
	Employees.....1,000..	22.6	22.6	4.1	1.8	2.3	-	15.4	(D)	11.6	(D)	1.7	1.3	(Z)
	Value added in mining,mil.dol..	661.9	661.8	75.5	34.0	41.5	-	505.0	(D)	446.2	(D)	81.2	-	.1
102	Copper ores:													
	Establishments.....number..	156	126	65	4	60	1	27	7	20	-	8	26	30
	Employees.....1,000..	20.9	20.5	5.8	(D)	2.8	(D)	10.8	4.3	6.5	-	1.9	2.0	.4
	Value added in mining,mil.dol..	436.5	451.8	124.7	(D)	90.8	(D)	293.0	72.8	220.2	-	34.2	-	-15.4
103	Lead and zinc ores:													
	Establishments.....number..	167	148	94	94	-	-	37	37	-	-	7	10	19
	Employees.....1,000..	9.1	8.9	1.4	1.4	-	-	6.9	6.9	-	-	.3	.3	.2
	Value added in mining,mil.dol..	102.6	104.8	17.6	17.6	-	-	87.7	87.7	-	-	-5	-	-2.2
104	Gold and silver ores:													
	Establishments.....number..	183	156	96	95	1	-	57	12	44	1	-	3	27
	Employees.....1,000..	3.7	(D)	(D)	.3	(D)	-	3.4	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining,mil.dol..	51.3	(D)	(D)	.7	(D)	-	50.5	(D)	(D)	(D)	-	(D)	(D)
105	Bauxite and other aluminum ores:													
	Establishments.....number..	17	17	10	-	9	1	2	-	2	-	4	1	-
	Employees.....1,000..	.6	.6	.5	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining,mil.dol..	22.5	22.5	20.9	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	-
106	Ferroalloy ores, except vanadium:													
	Establishments.....number..	43	41	22	9	13	-	13	7	1	5	5	1	2
	Employees.....1,000..	4.0	(D)	(D)	(D)	.1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining,mil.dol..	73.5	(D)	(D)	(D)	7.2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
108	Metal mining services:													
	Establishments.....number..	148	148	-	-	-	-	-	-	-	-	-	148	-
	Employees.....1,000..	2.6	2.6	-	-	-	-	-	-	-	-	-	2.6	-
	Value added in mining,mil.dol..	33.6	33.6	-	-	-	-	-	-	-	-	-	33.6	-
109	Miscellaneous metal ores:													
	Establishments.....number..	295	273	177	137	39	1	70	12	55	3	13	13	22
	Employees.....1,000..	7.4	7.1	1.2	1.1	(D)	(D)	4.7	2.5	1.7	.4	.8	.3	.3
	Value added in mining,mil.dol..	174.8	177.3	24.0	22.7	(D)	(D)	130.7	77.8	43.0	9.9	22.6	-	-2.5
	MIDDLE ATLANTIC DIVISION													
101	Iron ores:													
	Establishments.....number..	9	8	1	-	1	-	5	4	1	-	1	1	1
	Employees.....1,000..	2.9	(D)	(D)	-	(D)	-	2.8	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining,mil.dol..	42.4	(D)	(D)	-	(D)	-	42.0	(D)	(D)	-	(D)	(D)	(D)
	New York:													
	Establishments.....number..	32	29	4	1	3	-	6	4	2	-	-	19	3
	Employees.....1,000..	2.9	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	(D)
	Value added in mining,mil.dol..	34.9	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	(D)
	EAST NORTH CENTRAL DIVISION													
	Establishments.....number..	56	56	24	15	9	-	9	3	5	1	8	15	-
	Employees.....1,000..	7.9	7.9	2.4	2.3	.1	-	3.7	1.8	(D)	(D)	.5	1.3	-
	Value added in mining,mil.dol..	171.0	171.0	44.4	39.8	4.6	-	110.0	26.7	(D)	(D)	14.2	2.0	-
101	Iron ores:													
	Establishments.....number..	29	29	14	7	7	-	4	-	4	-	3	8	-
	Employees.....1,000..	(D)	(D)	1.9	(D)	(D)	-	1.9	-	1.9	-	(D)	(D)	-
	Value added in mining,mil.dol..	(D)	(D)	37.1	(D)	(D)	-	84.3	-	84.3	-	(D)	(D)	-
	Michigan:													
	Establishments.....number..	33	33	13	8	5	-	7	2	5	-	4	9	-
	Employees.....1,000..	(D)	(D)	1.9	(D)	(D)	-	(D)	(D)	(D)	-	(D)	.6	-
	Value added in mining,mil.dol..	(D)	(D)	37.0	(D)	(D)	-	(D)	(D)	(D)	-	(D)	1.9	-

See footnotes at end of table.

**TABLE 3. Selected Statistics For Industry Groups By Type Of Operations And Geographic Areas:
1967--Continued**

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments											Non-producing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed ¹	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
101	WEST NORTH CENTRAL DIVISION													
	Establishments.....number..	106	100	27	13	14	-	38	7	30	1	8	27	6
	Employees.....1,000..	16.1	(D)	2.1	.1	2.0	-	11.9	4.7	(D)	(D)	(D)	.7	(D)
	Value added in mining.mil.dol..	451.4	(D)	31.1	1.9	29.3	-	333.9	55.8	(D)	(D)	(D)	8.1	(D)
	Iron ores:													
	Establishments.....number..	54	54	10	1	9	-	30	1	29	-	6	8	-
	Employees.....1,000..	(D)	(D)	2.0	(D)	(D)	-	8.1	(D)	(D)	-	1.4	(D)	-
	Value added in mining.mil.dol..	(D)	(D)	30.3	(D)	(D)	-	295.2	(D)	(D)	-	70.0	(D)	-
	Minnesota:													
	Establishments.....number..	58	57	7	1	6	-	31	-	30	1	6	13	1
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	-	7.1	-	(D)	(D)	(D)	(D)	(D)
	Value added in mining.mil.dol..	(D)	(D)	(D)	(D)	(D)	-	292.7	-	(D)	(D)	(D)	(D)	(D)
	Missouri:													
	Establishments.....number..	28	24	5	2	3	-	5	5	-	-	-	14	4
	Employees.....1,000..	(D)	3.0	(D)	(D)	(D)	-	(D)	(D)	-	-	-	(D)	(D)
Value added in mining.mil.dol..	(D)	43.8	(D)	(D)	(D)	-	(D)	(D)	-	-	-	(D)	(D)	
101	EAST SOUTH CENTRAL DIVISION													
	Establishments.....number..	36	35	10	1	8	1	18	10	8	-	1	6	1
	Employees.....1,000..	2.7	(D)	.1	(D)	(D)	(D)	2.4	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining.mil.dol..	38.9	(D)	1.0	(D)	(D)	(D)	36.9	(D)	(D)	-	(D)	(D)	(D)
	Iron ores:													
	Establishments.....number..	16	15	6	-	6	-	8	1	7	-	-	1	1
	Employees.....1,000..	.6	(D)	(Z)	-	(Z)	-	.5	.3	.2	-	-	(D)	(D)
	Value added in mining.mil.dol..	7.8	(D)	.4	-	.4	-	7.4	5.5	1.9	-	-	(D)	(D)
	Lead and zinc ores:													
	Establishments.....number..	9	8	-	-	-	-	8	8	-	-	-	-	1
	Employees.....1,000..	1.3	(D)	-	-	-	-	(D)	(D)	-	-	-	-	(D)
	Value added in mining.mil.dol..	13.7	(D)	-	-	-	-	(D)	(D)	-	-	-	-	(D)
	Tennessee:													
	Establishments.....number..	13	12	-	-	-	-	9	9	-	-	-	3	1
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	(D)	-	-	-	(D)	(D)
Value added in mining.mil.dol..	(D)	(D)	-	-	-	-	(D)	(D)	-	-	-	(D)	(D)	
103	Lead and zinc ores:													
	Establishments.....number..	9	8	-	-	-	-	8	8	-	-	-	-	1
	Employees.....1,000..	1.3	(D)	-	-	-	-	(D)	(D)	-	-	-	-	(D)
	Value added in mining.mil.dol..	13.7	(D)	-	-	-	-	(D)	(D)	-	-	-	-	(D)
	Alabama:													
	Establishments.....number..	21	20	8	-	8	-	9	1	8	-	1	2	1
	Employees.....1,000..	7	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining.mil.dol..	9.1	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	(D)	(D)
	WEST SOUTH CENTRAL DIVISION													
	Establishments.....number..	61	59	38	21	16	1	4	-	3	1	7	10	2
	Employees.....1,000..	1.1	(D)	.6	.2	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
	Value added in mining.mil.dol..	28.7	(D)	23.0	1.9	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
	Bauxite and other aluminum ores:													
	Establishments.....number..	9	9	5	-	4	1	1	-	1	-	2	1	-
	Employees.....1,000..	.5	.5	(D)	-	.1	(D)	(D)	-	(D)	-	(D)	(D)	-
Value added in mining.mil.dol..	21.2	21.2	(D)	-	11.4	(D)	(D)	-	(D)	-	(D)	(D)	-	
105	Arkansas:													
	Establishments.....number..	13	12	7	-	6	1	1	-	1	-	2	2	1
	Employees.....1,000..	.7	(D)	.4	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)
	Value added in mining.mil.dol..	21.0	(D)	20.3	-	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)
	Bauxite and other aluminum ores:													
	Establishments.....number..	9	9	5	-	4	1	1	-	1	-	2	1	-
	Employees.....1,000..	.5	.5	(D)	-	.1	(D)	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining.mil.dol..	21.2	21.2	(D)	-	11.4	(D)	(D)	-	(D)	-	(D)	(D)	-
	Texas:													
	Establishments.....number..	29	28	15	5	10	-	3	-	2	1	4	6	1
	Employees.....1,000..	.2	(D)	.1	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)
	Value added in mining.mil.dol..	4.9	(D)	1.0	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. Selected Statistics For Industry Groups By Type Of Operations And Geographic Areas:
1967--Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments											Nonproducing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed ¹	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	MOUNTAIN DIVISION													
	Establishments.....number..	609	546	329	242	86	1	94	42	47	5	18	105	63
	Employees.....1,000..	34.9	33.9	7.8	2.9	(D)	(D)	20.5	11.2	(D)	(D)	2.5	3.1	(Z)
	Value added in mining.mil.dol..	708.9	708.2	161.2	44.4	(D)	(D)	484.0	202.7	(D)	(D)	47.8	15.2	.7
101	Iron ores:													
	Establishments.....number..	22	20	13	-	13	-	7	1	5	1	-	-	2
	Employees.....1,000..	(D)	1.2	.1	-	.1	-	1.0	(D)	(D)	(D)	-	-	(D)
	Value added in mining.mil.dol..	(D)	31.0	6.8	-	6.8	-	24.1	(D)	(D)	(D)	-	-	(D)
106	Ferroalloy ores, except vanadium:													
	Establishments.....number..	23	21	11	6	5	-	8	5	1	2	1	1	2
	Employees.....1,000..	(D)	3.3	(Z)	(Z)	(Z)	-	3.2	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining.mil.dol..	(D)	53.9	.5	.2	.4	-	53.3	(D)	(D)	(D)	(D)	(D)	(D)
109	Miscellaneous metal ores:													
	Establishments.....number..	201	186	149	126	23	-	22	8	14	-	6	10	14
	Employees.....1,000..	5.3	5.3	1.1	1.0	.1	-	3.3	(D)	(D)	-	.6	.3	(Z)
	Value added in mining.mil.dol..	140.4	131.1	22.5	22.2	.3	-	90.8	(D)	(D)	-	17.8	-	9.3
	Montana:													
	Establishments.....number..	42	38	24	18	5	1	3	2	1	-	5	6	4
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining.mil.dol..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)
102	Copper ores:													
	Establishments.....number..	9	9	5	-	4	1	-	-	-	-	3	1	-
	Employees.....1,000..	(D)	(D)	(D)	-	-	(D)	-	-	-	-	(D)	(D)	-
	Value added in mining.mil.dol..	(D)	(D)	(D)	-	(Z)	(D)	-	-	-	-	(D)	(D)	-
103	Lead and zinc ores:													
	Establishments.....number..	9	8	7	7	-	-	-	-	-	-	1	-	1
	Employees.....1,000..	.1	(D)	(D)	(D)	-	-	-	-	-	-	(D)	-	(D)
	Value added in mining.mil.dol..	.7	(D)	(D)	(D)	-	-	-	-	-	-	(D)	-	(D)
	Idaho:													
	Establishments.....number..	55	50	29	22	7	-	14	12	1	1	2	5	5
	Employees.....1,000..	(D)	(D)	.1	.1	(Z)	-	2.2	2.1	(D)	(D)	(D)	(D)	(D)
	Value added in mining.mil.dol..	(D)	(D)	.4	.3	.1	-	31.7	31.7	(D)	(D)	(D)	(D)	(D)
103	Lead and zinc ores:													
	Establishments.....number..	22	19	10	10	-	-	6	6	-	-	1	2	3
	Employees.....1,000..	1.3	(D)	(Z)	(Z)	-	-	(D)	(D)	-	-	(D)	(D)	(D)
	Value added in mining.mil.dol..	17.3	(D)	.1	.1	-	-	(D)	(D)	-	-	(D)	(D)	(D)
104	Gold and silver ores:													
	Establishments.....number..	20	19	11	11	-	-	7	5	1	1	-	1	1
	Employees.....1,000..	(D)	(D)	(D)	(D)	-	-	.9	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining.mil.dol..	(D)	(D)	(D)	(D)	-	-	14.6	(D)	(D)	(D)	-	(D)	(D)
	Wyoming:													
	Establishments.....number..	33	31	10	8	2	-	7	3	3	1	-	14	2
	Employees.....1,000..	1.9	(D)	(D)	(D)	(D)	-	1.3	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining.mil.dol..	45.9	(D)	(D)	(D)	(D)	-	43.9	(D)	(D)	(D)	-	(D)	(D)
	Colorado:													
	Establishments.....number..	159	144	100	86	14	-	16	11	3	2	3	26	14
	Employees.....1,000..	5.9	5.8	.6	(D)	(D)	-	4.6	4.6	(D)	(D)	(D)	(D)	.1
	Value added in mining.mil.dol..	93.5	95.8	9.2	(D)	(D)	-	83.4	83.8	(D)	(D)	(D)	(D)	.3
109	Miscellaneous metal ores:													
	Establishments.....number..	94	89	79	69	10	-	2	2	-	-	2	6	5
	Employees.....1,000..	1.6	1.6	.5	.5	(Z)	-	(D)	(D)	-	-	(D)	(D)	(Z)
	Value added in mining.mil.dol..	33.8	33.8	8.0	7.7	.3	-	(D)	(D)	-	-	(D)	(D)	(Z)
	New Mexico:													
	Establishments.....number..	54	49	30	20	10	-	9	4	3	2	2	8	5
	Employees.....1,000..	4.0	3.9	.8	.4	.5	-	2.4	(D)	(D)	(D)	(D)	(D)	.1
	Value added in mining.mil.dol..	86.9	100.9	26.2	8.8	17.3	-	66.2	(D)	(D)	(D)	(D)	(D)	-14.0

See footnotes at end of table.

TABLE 3. Selected Statistics For Industry Groups By Type Of Operations And Geographic Areas:
1967--Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments											Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed ¹		
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods				
	MOUNTAIN DIVISION--Continued														
102	Arizona:														
	Establishments.....number..	94	82	42	16	26	-	19	6	13	-	1	22	10	
	Employees.....1,000..	10.1	9.8	1.1	(D)	(D)	-	8.0	2.3	5.7	-	(D)	(D)	.1	
	Value added in mining,mil.dol..	280.0	281.0	33.2	(D)	(D)	-	238.8	31.1	207.7	-	(D)	(D)	-	
	Copper ores:														
	Establishments.....number..	51	43	21	1	20	-	15	2	13	-	1	6	8	
	Employees.....1,000..	(D)	(D)	1.0	(D)	(D)	-	(D)	(D)	5.7	-	(D)	(D)	(D)	
	Value added in mining,mil.dol..	(D)	(D)	32.3	(D)	(D)	-	(D)	(D)	207.7	-	(D)	(D)	(D)	
	Utah:														
	Establishments.....number..	100	88	64	58	6	-	6	1	5	-	4	14	12	
101	Employees.....1,000..	4.8	4.8	2.6	1.0	1.6	-	.5	(D)	(D)	-	(D)	(D)	(Z)	
	Value added in mining,mil.dol..	105.1	105.1	62.8	15.7	47.2	-	13.4	(D)	(D)	-	(D)	(D)	-1	
	Iron ores:														
	Establishments.....number..	5	4	2	-	2	-	2	-	2	-	-	-	1	
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	(D)	
	Value added in mining,mil.dol..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	(D)	
	103	Lead and zinc ores:													
		Establishments.....number..	21	17	14	14	-	-	-	-	-	-	1	2	4
		Employees.....1,000..	1.0	1.0	(D)	(D)	-	-	-	-	-	-	(D)	(D)	(Z)
		Value added in mining,mil.dol..	7.5	7.5	(D)	(D)	-	-	-	-	-	-	(D)	(D)	(Z)
Nevada:															
Establishments.....number..		72	62	29	13	16	-	21	3	18	-	1	11	10	
Employees.....1,000..		2.1	2.0	.5	(D)	(D)	-	1.1	(D)	(D)	-	(D)	(D)	.1	
Value added in mining,mil.dol..		38.5	39.1	8.4	(D)	(D)	-	25.4	(D)	(D)	-	(D)	(D)	-1.6	
PACIFIC DIVISION															
Establishments.....number..		205	180	68	52	16	-	87	11	72	4	-	25	25	
106	Employees.....1,000..	3.3	3.3	1.2	(D)	(D)	-	(D)	(D)	(D)	.4	-	(D)	(Z)	
	Value added in mining,mil.dol..	72.8	72.8	57.1	(D)	(D)	-	(D)	(D)	(D)	2.7	-	(D)	(Z)	
	Ferroalloy ores, except vanadium:														
	Establishments.....number..	9	9	6	3	3	-	3	2	-	1	-	-	-	
	Employees.....1,000..	(D)	(D)	.1	(D)	(D)	-	(D)	(D)	-	(D)	-	-	-	
	Value added in mining,mil.dol..	(D)	(D)	6.7	(D)	(D)	-	(D)	(D)	-	(D)	-	-	-	
	109	Miscellaneous metal ores:													
		Establishments.....number..	59	54	13	4	9	-	40	4	34	2	-	1	5
		Employees.....1,000..	.7	.7	(Z)	(Z)	(Z)	-	(D)	(D)	.3	(D)	-	(D)	-
		Value added in mining,mil.dol..	11.5	11.5	.4	.2	.2	-	(D)	(D)	5.8	(D)	-	(D)	-
Alaska:															
Establishments.....number..		40	34	9	7	2	-	21	-	21	-	-	4	6	
Employees.....1,000..		0.2	.1	(Z)	(D)	(D)	-	.1	-	.1	-	-	(Z)	(Z)	
Value added in mining,mil.dol..		0.9	1.0	.1	(D)	(D)	-	1.2	-	1.2	-	-	(Z)	-(Z)	

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand or 50 employees.

¹Includes data for central administrative offices and auxiliary units in addition to plants where it was not possible to classify the plant based on the information available.

TABLE 4. Detailed Statistics: 1967

Item	10-Metal mining industries	Industry 1011.--Iron ores	Industry 1021.--Copper ores	Industry 1031.--Lead and zinc ores			Industry 1042.--Lode gold	Industry 1043.--Placer gold	Industry 1044.--Silver ores
				Total	Lead ores subindustry	Zinc ores subindustry			
Establishments, total.....number..	1,155	146	156	167	104	63	77	48	58
With 1 to 19 employees.....do....	837	67	94	110	82	28	71	46	51
With 20 employees or more.....do....	318	79	62	57	22	35	6	2	7
All employees (average for the year).....1,000..	70.9	22.6	20.9	9.1	4.2	4.9	2.4	0.2	1.2
Payroll (all employees), total for year..million dollars..	552.4	185.9	170.9	60.9	30.6	30.3	16.2	1.1	8.2
Production, development, and exploration workers:									
Average for the year.....1,000..	55.4	18.0	15.0	7.5	3.3	4.1	2.0	0.2	1.0
March.....do....	65.0	17.8	24.3	7.8	3.5	4.3	2.1	0.2	1.1
May.....do....	65.1	18.1	24.0	7.8	3.5	4.3	2.0	0.2	1.1
August.....do....	48.2	18.5	7.2	7.3	3.2	4.1	2.1	0.2	0.9
November.....do....	43.6	17.5	4.7	7.0	3.1	3.9	2.0	0.1	0.7
Man-hours.....millions..	113.9	36.2	32.5	15.0	6.7	8.3	4.6	0.4	1.9
January-March.....do....	33.2	8.8	12.9	3.9	1.8	2.1	1.2	0.1	0.5
April-June.....do....	34.2	9.4	13.0	4.0	1.8	2.2	1.2	0.1	0.5
July-September.....do....	24.2	9.1	4.0	3.6	1.6	2.0	1.1	0.1	0.4
October-December.....do....	22.6	8.9	2.6	3.5	1.5	2.0	1.1	0.1	0.4
Wages.....million dollars..	396.1	133.4	114.6	46.2	21.9	24.3	12.9	0.9	6.4
Supplemental labor cost not included in payroll.....do....	72.8	23.4	25.8	6.5	2.5	4.0	1.6	0.1	0.9
Legally required expenditures, including Social									
Security contributions.....do....	32.9	9.2	9.5	3.5	1.4	2.1	1.0	0.1	0.5
Payments for voluntary programs.....do....	39.9	14.2	16.3	3.1	1.1	2.0	0.6	(Z)	0.3
Cost of supplies, etc., total.....do....	1,079.4	400.3	361.6	92.4	62.9	29.4	10.5	0.7	5.1
Supplies used, minerals received for preparation,									
and purchased machinery.....do....	837.6	297.6	306.8	63.3	40.3	23.0	8.5	0.4	4.1
Cost of resales.....do....	4.8	2.6	0.1	(Z)	-	(Z)	-	-	-
Purchased fuels consumed.....do....	51.2	34.3	7.5	1.5	0.8	0.7	0.4	0.1	0.1
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	6,998.7	2,734.8	2,419.6	764.1	372.9	391.2	130.8	11.1	74.4
Cost.....million dollars..	64.9	28.4	19.2	6.7	3.4	3.3	1.3	0.1	0.5
Generated less sold.....million kw.-hrs..	2,964.9	2,269.3	545.5	16.1	5.3	10.8	30.5	2.2	0.9
Contract work.....million dollars..	121.0	37.3	27.9	20.8	18.4	2.4	0.3	(Z)	0.4
Value of shipments and receipts (including resales),									
total.....do....	2,296.2	953.4	675.9	151.2	65.5	85.6	42.3	2.5	18.5
Value of resales.....do....	4.9	2.8	0.1	(Z)	-	(Z)	-	-	-
Value added in mining.....do....	1,556.6	661.9	436.5	102.6	36.9	65.7	33.3	2.1	16.0
Capital expenditures (except land and mineral rights),									
total.....do....	339.8	108.8	122.1	43.8	34.2	9.5	1.5	0.3	2.6
Mineral development and exploration.....do....	55.2	8.1	20.4	11.3	7.7	3.6	0.3	0.1	1.7
New structures and additions.....do....	121.9	60.8	23.5	15.1	14.2	0.9	(Z)	0.1	0.1
New machinery and equipment.....do....	156.8	38.2	74.9	17.1	12.2	4.9	1.2	0.1	0.8
Used plant and equipment.....do....	6.2	1.7	3.4	0.3	0.2	0.1	(Z)	(Z)	(Z)
Gross book value of fixed assets, total.....do....	3,962.8	1,884.0	1,111.3	322.5	194.6	127.9	59.5	25.2	12.4
Mineral properties.....do....	522.4	94.3	173.6	105.9	72.1	33.8	18.6	6.9	5.8
Building and other structures (excluding land).....do....	1,342.4	871.8	207.6	104.0	73.6	30.4	24.7	1.1	1.7
Machinery and equipment.....do....	2,098.5	918.0	730.1	112.5	48.9	63.6	16.3	17.3	4.9
Mineral development and exploration expenditures,									
total.....do....	100.2	32.3	27.5	17.6	11.5	6.1	1.0	0.1	2.5
Capitalized.....do....	56.1	8.6	20.9	11.2	7.6	3.6	0.2	0.1	1.7
Expensed.....do....	44.1	23.8	6.6	6.4	3.9	2.5	0.7	(Z)	0.9
Mineral rights and geological expenditures.....do....	20.5	7.1	5.5	2.3	1.4	0.9	0.7	(Z)	0.3
Lease and land acquisition of nonproducing acreage.....do....	4.7	0.4	1.3	0.6	0.3	0.3	0.3	-	0.3
Geological and geophysical.....do....	7.3	1.3	2.9	1.5	1.0	0.5	0.1	(Z)	(Z)
Lease rents.....do....	8.6	5.4	1.3	0.3	0.1	0.1	0.4	(Z)	(Z)
Man-hours worked by production, development, and									
exploration workers, total.....millions..	113.9	36.2	32.5	15.0	6.7	8.3	4.6	0.4	1.9
At mines, total.....do....	87.0	24.9	25.0	13.1	6.1	7.0	4.1	0.4	1.8
Underground.....do....	39.5	6.4	7.4	10.6	5.0	5.6	2.9	-	1.4
Open-pit.....do....	25.0	11.7	10.3	-	-	-	0.2	0.3	(Z)
Surface (including mine shops and yards).....do....	22.5	6.7	7.3	2.6	1.1	1.5	1.0	0.1	0.3
At preparation plants.....do....	27.1	11.3	7.6	1.9	0.6	1.3	0.6	(Z)	0.1
Man-hours spent on exploration and development									
(included above).....do....	8.5	1.8	1.9	1.6	0.9	0.7	0.1	(Z)	0.1

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967—Continued

Item	Industry 1051.-- Bauxite and other aluminum ores	Industry 1062.-- Manganese ores	Industries 1064 and 1069.-- Tungsten ores and ferroalloy ores, n.e.c.	Industry 1081.-- Metal mining services	Industry 1092.-- Mercury ores	Industry 1093.-- Titanium ores	Industry 1094.-- Uranium- radium- vanadium ores	Industry 1099.-- Metallic ores, n.e.c.
Establishments, total.....number..	17	20	23	148	62	7	188	38
With 1 to 19 employees.....do....	10	16	16	114	53	1	154	34
With 20 employees or more.....do....	7	4	7	34	9	6	34	4
All employees (average for the year).....1,000..	0.6	0.2	3.8	2.6	0.7	0.9	5.4	0.3
Payroll (all employees), total for year..million dollars..	4.1	0.8	31.1	19.1	4.7	6.4	40.5	2.4
Production, development, and exploration workers:								
Average for the year.....1,000..	0.5	0.1	3.0	2.4	0.6	0.7	4.1	0.3
March.....do....	0.5	0.1	3.1	2.4	0.6	0.8	3.9	0.3
May.....do....	0.5	0.1	3.1	2.5	0.6	0.7	4.1	0.3
August.....do....	0.5	0.1	3.1	2.4	0.6	0.7	4.1	0.3
November.....do....	0.5	0.1	2.8	2.3	0.6	0.7	4.3	0.3
Man-hours.....millions..	0.8	0.2	6.0	4.5	1.2	1.4	8.5	0.6
January-March.....do....	0.2	0.1	1.5	1.1	0.3	0.4	2.0	0.2
April-June.....do....	0.2	0.1	1.5	1.2	0.3	0.4	2.1	0.2
July-September.....do....	0.2	0.1	1.5	1.1	0.3	0.3	2.2	0.2
October-December.....do....	0.2	0.1	1.5	1.1	0.3	0.4	2.3	0.1
Wages.....million dollars..	2.9	0.6	22.4	16.3	3.8	4.9	28.9	2.0
Supplemental labor cost not included in payroll.....do....	0.7	0.1	4.8	2.3	0.5	1.0	4.8	0.3
Legally required expenditures, including Social								
Security contributions.....do....	0.2	0.1	3.7	1.8	0.4	0.4	2.3	0.2
Payments for voluntary programs.....do....	0.2	(Z)	1.1	0.5	0.1	0.7	2.5	0.1
Cost of supplies, etc., total.....do....	6.7	2.5	45.0	17.2	(D)	7.5	116.6	(D)
Supplies used, minerals received for preparation,								
and purchased machinery.....do....	3.5	2.2	36.5	14.8	(D)	5.0	82.8	(D)
Cost of resales.....do....	1.9	-	-	(Z)	(D)	-	(D)	(D)
Purchased fuels consumed.....do....	0.5	(Z)	1.1	1.0	(D)	0.5	3.3	(D)
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	17.5	9.3	372.6	1.2	(D)	142.6	279.3	(D)
Cost.....million dollars..	0.3	0.1	3.0	(Z)	(D)	1.3	(D)	(D)
Generated less sold.....million kw.-hrs..	-	-	55.4	-	(D)	-	42.5	(D)
Contract work.....million dollars..	0.6	0.1	4.4	1.4	(D)	0.7	26.8	(D)
Value of shipments and receipts (including resales),								
total.....do....	28.8	4.0	104.3	48.3	10.6	23.5	218.2	14.8
Value of resales.....do....	1.9	-	-	(Z)	(Z)	-	(D)	(D)
Value added in mining.....do....	22.5	1.8	71.7	33.6	8.3	17.3	142.1	7.1
Capital expenditures (except land and mineral rights),								
total.....do....	0.4	0.2	12.4	2.3	(D)	1.3	40.5	(D)
Mineral development and exploration.....do....	(Z)	(Z)	1.0	(Z)	(D)	(Z)	11.9	(D)
New structures and additions.....do....	0.1	(Z)	2.0	(Z)	(D)	(Z)	17.6	(D)
New machinery and equipment.....do....	0.3	0.2	9.2	2.1	(D)	1.3	10.8	(D)
Used plant and equipment.....do....	(Z)	(Z)	0.2	0.2	(D)	(Z)	0.2	(D)
Gross book value of fixed assets, total.....do....	20.5	5.4	134.9	25.9	8.4	35.5	301.0	16.3
Mineral properties.....do....	5.3	0.1	14.1	-	2.1	2.2	91.2	2.3
Building and other structures (excluding land).....do....	4.0	1.6	9.8	1.0	1.4	8.6	101.9	3.2
Machinery and equipment.....do....	11.2	3.7	111.0	24.9	5.0	24.8	107.9	10.9
Mineral development and exploration expenditures,								
total.....do....	(Z)	0.2	3.1	0.6	0.4	(Z)	14.6	0.3
Capitalized.....do....	(Z)	0.1	1.1	(Z)	0.2	(Z)	11.9	0.1
Expensed.....do....	(Z)	(Z)	2.0	0.6	0.3	-	2.7	0.1
Mineral rights and geological expenditures.....do....	0.2	-	0.1	0.1	(D)	-	4.0	(D)
Lease and land acquisition of nonproducing acreage.....do....	(Z)	-	0.1	-	(Z)	-	1.7	-
Geological and geophysical.....do....	0.1	-	(Z)	0.1	(D)	-	1.3	(D)
Lease rents.....do....	0.1	-	(Z)	(Z)	(D)	-	0.9	(D)
Man-hours worked by production, development, and								
exploration workers, total.....millions..	0.8	0.2	6.0	4.5	1.2	1.4	8.5	0.6
At mines, total.....do....	0.7	0.1	4.7	4.5	0.9	1.0	5.5	0.3
Underground.....do....	0.2	0.1	2.7	¹ 3.3	0.5	-	4.0	-
Open-pit.....do....	0.3	0.1	0.4	² 0.2	(D)	0.7	0.5	(D)
Surface (including mine shops and yards).....do....	0.2	(Z)	1.6	³ 1.0	(D)	0.3	1.0	(D)
At preparation plants.....do....	0.1	0.1	1.3	(X)	0.3	0.4	3.1	0.3
Man-hours spent on exploration and development								
(included above).....do....	(Z)	-	0.6	(X)	0.1	(Z)	0.7	(Z)

Note: The sum of the detail may not add to totals due to independent rounding.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Represents less than one-half of the unit of measure specified.

¹For metal mining services industries, represents man-hours on exploration work, including geophysical and other exploratory surveying.

²For metal mining services industries, represents man-hours on stripping overburden.

³For metal mining services industries, represents man-hours on other services, such as sinking mine shafts, driving mine tunnels, and drilling. It also represents mining minerals for the account of others, for which there were no man-hours.



1967 CENSUS OF Mineral Industries



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INDUSTRY SERIES

IRON ORES

SIC code	Industry
1011	Iron ores

Issued December 1970



U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	3
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	4
3 Detailed Statistics, by Selected Types of Operations: 1967	5
4 General Statistics, by Employment Size of Establishment: 1967	6
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	6
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	7
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	8
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

IRON ORES

INDUSTRY DESCRIPTION

This report shows 1967 Census of Mineral Industries statistics for establishments classified in industry 1011, Iron Ores. This industry represents establishments primarily engaged in mining, beneficiating, or otherwise preparing iron ores and manganiferous ores valued chiefly for their iron content. The industry includes the production of pellets and other agglomerates in association with mining and beneficiating activities, as well as activities at separately operated agglomeration plants. Blast furnaces primarily engaged in producing pig iron from iron ores are classified as manufacturing plants in industry 3312, Blast Furnaces and Steel Mills. The production of agglomerates in conjunction with blast furnace operations is also classified as manufacturing.

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

SUMMARY OF FINDINGS

The total value of shipments and receipts of the Iron Ores Industry amounted to \$953.4 million. Establishments in the iron ores industry accounted for more than 90 percent of the total of approximately 82.7 million long tons of usable iron ore shipped in all mineral industries.

These figures represent gross value of shipments and contain duplication because of the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment or resale.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the iron ores industry are, in general, comparable with product statistics on iron ores published by the Bureau of Mines. Such differences as occur result principally from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

1. The Bureau of the Census defines as manganiferous iron ores material containing at least 5 percent manganese in the natural state but valued chiefly for its iron content. Figures for such ores are included in the primary products of the iron ores industry. The Bureau of Mines excludes all manganiferous ores (ores containing 5 to 35 percent manganese) from its statistics on iron ores, although a figure for such ores is reproduced in the Bureau's report on iron ores.

2. Census Bureau crude iron ore statistics exclude any iron ore mined by establishments classified by Census in industries other than iron ores, crude metal ores mined by an establishment usually being designated a primary product of the industry in which the establishment mining it was classified. However, a rough estimate of the magnitude of such crude ore can be made from Census statistics for shipments of iron ores, treated ores, and agglomerates by other industries, and such figures indicate that this production was very small. Bureau of Mines statistics on crude iron ore mined include data for crude iron ore mined regardless of the producing establishments' industry classification.

3. The Bureau of the Census excludes single unit establishments with no paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such iron ore establishments is very small.

4. Bureau of the Census product statistics cover treated ores and agglomerates produced, whether from domestic or imported materials. The Bureau of Mines excludes the product of foreign ores beneficiated in the United States.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Pro- duction	Shipments including interplant transfers		Pro- duction	Shipments	
		Quantity	Value		Quantity	Value
	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)
Iron ore, except manganiferous iron ore:						
Crude iron ore.....	¹ 178,800	(D)	(D)	183,397	(NA)	(NA)
Net production and shipments	¹ 85,900	² 82,700	² 863,200	84,179	82,415	817,511
Manganiferous iron ore:						
Net production and shipments	(D)	(D)	(D)	(NA)	³ 237	(NA)

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

¹Manganiferous iron ore is included with "iron ore, except manganiferous iron ore."

²Represents direct-shipping ore, treated ores to consumers, and agglomerates.

³Represents manganiferous iron ore and for Minnesota ferruginous manganese ore.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net shipments and receipts ¹	Usable iron ore produced ²	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies, fuels and purchased electric energy	Minerals received for treatment or agglomeration	Contract work	Purchased machinery installed				
	(number)	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million long tons)	(million dollars)
INDUSTRY 1011.--IRON ORES																	
1967 ³ ..	(NA)	146	79	22.6	185.9	18.0	36.2	133.4	661.9	222.1	91.9	37.3	49.0	953.4	(D)	85.9	108.8
1963...	115	208	101	23.1	161.6	18.1	34.5	112.8	549.3	161.6	64.6	55.5	27.9	762.2	709.4	73.8	96.6
1958...	127	243	128	30.1	169.0	22.5	39.9	116.3	487.7	106.8	64.7	29.4	18.5	664.5	617.9	66.9	42.6
1954...	94	225	135	34.2	156.9	28.2	53.3	119.7	435.7	99.2	12.8	47.5	37.0	547.2	539.2	78.2	85.0
1939...	116	⁴ 196	(NA)	22.7	33.3	20.4	38.5	27.4	133.4	17.2	(NA)	0.2	(NA)	(NA)	150.9	51.6	(NA)
1935...	(NA)	⁴ 199	(NA)	⁵ 16.2	⁵ 17.6	14.9	(NA)	14.6	65.9	10.9	(NA)	(NA)	(NA)	(NA)	76.7	31.0	(NA)
1929...	(NA)	186	(NA)	31.1	47.4	28.6	(NA)	41.0	167.1	28.7	(NA)	1.6	4.0	(NA)	197.3	74.0	(NA)
1919...	(NA)	308	(NA)	49.4	83.7	46.3	(NA)	76.7	177.4	38.3	-	2.5	(NA)	218.2	218.2	61.2	(NA)
1909 ⁶ ..	196	320	(NA)	50.6	33.5	47.7	(NA)	30.0	89.6	17.6	-	2.8	(NA)	109.9	109.9	51.7	(NA)
1902...	365	⁴ 562	(NA)	41.6	23.8	⁷ 39.1	(NA)	21.7	55.7	9.1	(NA)	0.6	(NA)	(NA)	65.5	35.6	(NA)
1889...	(NA)	⁴ 685	(NA)	38.2	14.4	⁸ 36.3	(NA)	13.0	26.8	5.0	(NA)	1.6	(NA)	(NA)	33.4	14.5	(NA)
1880...	(NA)	805	(NA)	31.7	9.5	⁸ 30.4	(NA)	(NA)	20.3	2.9	(NA)	(NA)	(NA)	(NA)	23.2	7.1	(NA)
1870...	(NA)	420	(NA)	15.0	6.8	(NA)	(NA)	(NA)	11.9	1.3	(NA)	(NA)	(NA)	(NA)	13.2	3.4	(NA)
1860...	(NA)	157	(NA)	3.2	0.9	(NA)	(NA)	(NA)	1.9	0.3	(NA)	(NA)	(NA)	(NA)	2.2	0.9	(NA)
1850...	(NA)	197	(NA)	2.2	0.6	(NA)	(NA)	(NA)	1.2	0.1	(NA)	(NA)	(NA)	(NA)	1.2	(NA)	(NA)

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹For 1939 and earlier years, represents value of products and receipts.

²Represents direct shipping ore, treated ores for consumption, and agglomerates. Includes manganiferous iron ore valued chiefly for its iron content. Figures for 1967, 1963, 1958, and 1954 include production by establishments classified in industries other than iron ores.

³In 1967, for the first time data for establishments without paid employees were excluded from the census. In 1963, there were 18 establishments without paid employees in this industry; however, they accounted for less than 1 percent of this industry's value added.

⁴Represents number of mines.

⁵Excludes figures for employees at central offices maintained independently of mine offices.

⁶Excludes data for two producing manganiferous iron ore establishments.

⁷Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

⁸Represents the average number employed during the time the mines were active.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	INDUSTRY 1011.--IRON ORES												
United States, total.....	¹ 146	¹ 79	¹ 22.6	¹ 185.9	18.0	36.2	133.4	661.9	400.3	953.4	108.8	23.1	549.3
Geographic Area													
Northeast Region.....	9	5	2.9	20.9	2.4	4.7	17.0	42.4	20.7	61.5	1.5	(NA)	(NA)
Middle Atlantic Division.....	9	5	2.9	20.9	2.4	4.7	17.0	42.4	20.7	61.5	1.5	3.4	55.6
North Central Region.....	83	60	16.8	141.2	13.1	26.6	98.0	545.4	343.7	786.0	103.1	16.7	431.8
Minnesota.....	50	36	10.8	84.0	8.6	16.9	61.5	391.9	238.5	552.9	77.5	11.2	348.1
South Region.....	30	6	0.7	4.8	0.6	1.3	4.0	9.3	3.8	12.1	1.1	1.4	16.7
West Region.....	24	8	2.3	19.0	1.8	3.6	14.5	64.8	32.1	93.8	3.1	1.6	45.2
Type of Operation													
Producing establishments, total.....	¹ 140	¹ 79	¹ 22.6	¹ 185.8	18.0	36.1	133.4	661.8	399.9	953.4	108.2	20.1	554.9
Mines with treatment plants, total..	60	45	15.5	122.5	13.1	26.8	98.0	505.0	253.1	662.5	95.7	13.8	382.5
Open-pit.....	52	38	11.6	92.7	9.7	20.1	73.2	446.2	227.0	580.1	93.1	9.8	325.4

Note: Detail may not add to the total because of independent rounding.

Standard notes: -Represents zero. (X) Not applicable. (NA) Not available. (Z) Under 50 thousand (or under 50 employees.)

¹Includes 17 separately reported central administrative offices and related facilities which were not classified by type of operation.

TABLE 3. Detailed Statistics, by Selected Types of Operation: 1967

Item	United States, total	Producing establishments		
		Total	Mines with treatment plants	
			Total	Open-pit
Establishments, total.....number..	146	140	60	52
With 1 to 19 employees.....do....	67	61	15	14
With 20 to 99 employees.....do....	30	30	12	12
With 100 employees or more.....do....	49	49	33	26
All employees (average for the year).....1,000..	22.6	22.6	15.5	11.6
Payroll (all employees), total for year..million dollars..	185.9	185.8	122.5	92.7
Production, development, and exploration workers:				
Average for the year.....1,000..	18.0	18.0	13.1	9.7
March.....do....	17.8	17.8	12.7	9.0
May.....do....	18.1	18.1	13.0	9.9
August.....do....	18.5	18.5	13.7	10.5
November.....do....	17.5	17.5	12.9	9.6
Man-hours.....millions..	36.2	36.1	26.8	20.1
January-March.....do....	8.8	8.8	6.3	4.6
April-June.....do....	9.4	9.4	6.9	5.2
July-September.....do....	9.1	9.1	6.9	5.3
October-December.....do....	8.9	8.9	6.6	5.0
Wages.....million dollars..	133.4	133.4	98.0	73.2
Supplemental labor cost not included in payroll.....do....	23.4	23.3	16.3	11.3
Legally required expenditures, including Social Security contributions.....do....	9.2	9.2	6.7	4.8
Payments for voluntary programs.....do....	14.2	14.2	9.6	6.4
Cost of supplies, etc., total.....do....	400.3	399.9	253.1	227.0
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	297.6	297.2	167.5	147.2
Cost of resales.....do....	2.6	2.6	0.9	0.9
Purchased fuels consumed.....do....	34.3	34.3	24.2	22.4
Electric energy:				
Purchased:				
Quantity.....million kw.-hrs..	2,734.8	2,734.7	2,436.8	1,968.1
Cost.....million dollars..	28.4	28.4	25.4	21.7
Generated less sold.....million kw.-hrs..	2,269.3	2,269.3	1,353.8	1,353.8
Contract work.....million dollars..	37.3	32.3	35.2	35.1
Value of shipments and receipts (including resales), total.....do....	953.4	953.4	662.5	580.1
Value of resales.....do....	2.8	2.8	0.9	0.9
Value added in mining.....do....	661.9	661.8	505.0	446.2
Capital expenditures (except land and mineral rights), total.....do....	108.8	108.2	95.7	93.1
Mineral development and exploration.....do....	8.1	8.1	6.3	6.2
New structures and additions.....do....	60.8	60.6	58.5	58.4
New machinery and equipment.....do....	38.2	38.0	30.0	27.7
Used plant and equipment.....do....	1.7	1.5	0.9	0.8
Gross book value of fixed assets, total.....do....	1,884.0	1,881.2	1,452.4	1,324.1
Mineral properties.....do....	94.3	93.7	77.7	54.5
Building and other structures (excluding land).....do....	871.8	871.2	575.3	547.3
Machinery and equipment.....do....	918.0	916.3	799.4	722.3
Mineral development and exploration expenditures, total.....do....	32.3	32.3	23.1	22.1
Capitalized.....do....	8.6	8.5	6.4	6.3
Expensed.....do....	23.8	23.8	16.7	15.7
Mineral rights and geological expenditures.....do....	7.1	7.1	5.9	5.9
Lease and land acquisition of nonproducing acreage.....do....	0.4	0.4	0.4	0.4
Geological and geophysical.....do....	1.3	1.3	0.7	0.7
Lease rents.....do....	5.4	5.4	4.8	4.8
Net shipments of primary product.....1,000 short tons..	(NA)	(NA)	(NA)	(NA)
Crude minerals mined during 1967, by ownership.....do....	176.7	176.7	126.1	118.1
Production for own account.....do....	60.7	60.7	45.0	39.3
Production for accounts of others.....do....	1.8	1.8	1.6	1.6
Royalty production.....do....	114.0	114.0	79.5	77.1
Royalties paid.....million dollars..	26.7	26.7	22.2	20.9
Undistributed.....1,000 short tons..	0.2	0.2	(Z)	(Z)
Man-hours worked by production, development, and exploration workers, total.....millions..	36.2	36.1	26.8	20.1
At mines, total.....do....	24.9	24.8	18.2	12.3
Underground.....do....	6.4	6.4	3.9	-
Open-pit.....do....	11.7	11.7	8.4	8.4
Surface (including mine shops and yards).....do....	6.7	6.7	5.9	3.9
At preparation plants.....do....	11.3	11.3	8.6	7.8
Man-hours spent on exploration and development (included above).....do....	1.8	1.8	1.4	1.2

Note: Detail may not add to totals due to rounding.

Standard notes: -Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1011	Iron ores:										
	Establishments, total.....	146	22.6	185.9	18.0	36.2	133.4	661.9	400.3	953.4	108.8
	Establishments with an average of-										
	0 to 4 employees.....	38	.1	.5	(Z)	.1	.3	20.0	5.4	24.8	.7
	5 to 9 employees.....	16	.1	.7	.1	.2	.5	6.8	2.1	8.7	.2
	10 to 19 employees.....	13	.2	1.2	.1	0.3	0.8	3.3	0.9	3.8	0.6
	20 to 49 employees.....	15	.5	4.4	.2	.5	1.5	7.2	8.6	15.3	0.5
	50 to 99 employees.....	15	1.1	8.5	.8	1.7	5.9	53.5	12.3	63.4	2.4
	100 to 249 employees.....	25	3.7	33.2	2.7	5.3	19.8	97.8	64.4	157.1	5.0
	250 to 499 employees.....	11	3.9	35.3	3.2	6.8	26.1	132.1	82.2	161.8	52.4
	500 to 999 employees.....	8	5.3	40.1	4.6	9.4	33.2	105.3	75.2	153.2	27.2
	1,000 to 2,499 employees.....	4	7.8	62.1	6.2	12.1	45.4	235.9	149.3	365.4	19.9
	2,500 employees or more.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records.....	13	(Z)	.1	(Z)	(Z)	.1	.4	.1	.4	(Z)

Note: Detail may not add to totals due to independent rounding.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. - Represents zero. (X) Not applicable. (NA) Not available. (Z) Under 50 thousand (or under 50 employees.)

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1011	Iron ores.....1967..	953.4	(D)	(D)	1.8	(D)	863.2	(D)	(D)
	1963..	762.2	(D)	(D)	1.2	(D)	706.5	(D)	(D)

(D) Withheld to avoid disclosing data for individual companies.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
			Quantity	Value (million dollars)		Quantity	Value (million dollars)
	UNITED STATES						
1011- --	Iron ores net production and shipments, total ^{1,2}	85.9	82.7	863.2	73.8	74.5	706.5
10111 --	Crude iron ore, total.....	178.8	(D)	(D)	152.5	41.1	134.3
10111 21	Direct-shipping ore.....	16.6	16.0	112.7	12.4	13.6	91.9
10111 23	Beneficiating-grade ore.....	162.3	(D)	(D)	140.1	27.5	42.4
	Treated iron ores (including washed material).....	70.2	(D)	(D)	64.1	(D)	(D)
10112 03	For consumption.....	24.8	22.6	176.9	34.8	34.3	260.6
10112 05	For agglomeration.....	45.4	(D)	(D)	29.3	(D)	(D)
	Agglomerates.....	44.6	44.1	573.6	26.6	26.7	354.0
10112 06	Pellets.....	42.0	41.5	542.9	26.6	26.6	354.0
10112 08	Sinter, briquets, and other.....	2.6	2.6	30.7			
	NORTH CENTRAL REGION						
1011- --	Iron ores net production and shipments, total ^{1,2}	68.1	65.3	698.7	57.6	58.3	548.9
10111 --	Crude iron ores, total.....	147.9	(D)	(D)	120.8	38.7	118.7
10111 21	Direct-shipping ore.....	14.7	14.1	98.6	10.2	11.3	76.9
10111 23	Beneficiating-grade ore.....	133.2	(D)	(D)	110.6	27.3	41.8
	Treated iron ores (including washed material).....	54.9	(D)	(D)	50.4	(D)	(D)
10112 03	For consumption.....	17.0	15.3	122.6	26.3	25.8	196.2
10112 05	For agglomeration.....	37.9	(D)	(D)	24.0	(D)	(D)
10112 06	Agglomerates.....	36.3	35.9	477.5	21.1	21.1	275.9
10112 08							
	MINNESOTA						
1011- --	Iron ores net production and shipments.....	51.6	49.5	505.6	46.4	46.2	435.1
10112 06	Agglomerates.....	24.0	23.8	313.8	(NA)	(NA)	(NA)
10112 08							
	WEST REGION						
1011- --	Iron ores net production and shipments.....	11.3	11.2	92.1	7.9	8.0	60.2

Note: Detail may not add to totals due to independent rounding.

Standard notes: -Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

¹Represents the sum of direct-shipping ore, treated iron ores for consumption, and iron agglomerates.

²Figures for net production of manganiferous ore included with net production of iron ore.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
				INDUSTRY 1011.--IRON ORES			
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	331.9	(X)	236.2	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	297.6	(X)	1212.9	
	Ores and other iron and manganese-bearing materials for preparation:						
100093	Crude ores received for preparation.....	Million long tons.....	37.0	91.9	{	30.1	
100095	Prepared ores received for agglomeration.....	..do.....					2.1
100093	Crude ores produced and prepared at same establishment....	..do.....					112.4
100095	Prepared ores produced and agglomerated at same establishment.....	..do.....					28.3
353011	Purchased machinery installed.....		(X)	49.0	(X)	27.9	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	82.8	10.5	{	89.2	
289212	Ammonium nitrate.....	..do.....	67.8	3.9			
289214	Blasting accessories.....		(X)	1.7			(X)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	34.1			(X)
241100	Round or hewn wood products or stumpage.....		(X)	0.7	{	1287.3	
970099	All other supplies.....		(X)	104.5			(X)
	Undistributed supplies, minerals received for preparation and purchased machinery installed ³		(X)	1.2	(X)	1.8	
	Fuels used, total.....		(X)	34.3	(X)	23.3	
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	34,780.8	17.1	1,192.1	3.7	
291141	Fuel oil.....	1,000 bbls.....	1,499.1	6.2	267.3	9.9	
291151							
977000	Undistributed fuels ³		(X)	0.4	(X)	0.3	
	NORTH CENTRAL REGION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	287.7	(X)	196.3	
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	260.4	(X)	177.9	
	Ores and other iron and manganese-bearing materials for preparation:						
100093	Crude ores received for preparation.....	Million long tons.....	{	(D)	(D)	(2)	
100095	Prepared ores received for agglomeration.....	..do.....					(2)
100093	Crude ores produced and prepared at same establishment....	..do.....					99.2
100095	Prepared ores produced and agglomerated at same establishment.....	..do.....					35.0
353011	Purchased machinery installed.....		(X)	43.6	(X)	21.4	
	Supplies used:						
970099	All other supplies.....		(X)	2216.2	{	(X)	
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ³		(X)	0.6			
	Fuels used, total.....		(X)	27.2	(X)	18.5	
977000	Undistributed fuels ³		(X)	0.3	(X)	(NA)	
	Type of Operation						
	UNITED STATES						
	Producing establishments:						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	331.5	(X)	221.0	
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	297.2	(X)	197.8	
	Ores and other iron and manganese-bearing materials for preparation:						
100093	Crude ores received for preparation.....	Million long tons.....	{	37.0	(NA)	64.6	
100095	Prepared ores received for agglomeration.....	..do.....					91.9
100093	Crude ores produced and prepared at same establishment....	..do.....					127.2
100095	Prepared ores produced and agglomerated at same establishment.....	..do.....					42.6

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1011.--IRON ORES--Continued				
	<u>Type of Operation--Continued</u>						
	UNITED STATES--Continued						
	Producing establishments--Continued						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used--Continued						
	Selected supplies, minerals received for preparation and purchased machinery installed--Continued						
	Supplies used:						
289211	Explosive materials except ammonium nitrate.....	Million pounds.	82.8	10.5	}	87.7	
289212	Ammonium nitrate.....	do.....	67.8	3.9			
289214	Blasting accessories.....		(X)	1.7			
331201	Steel mill shapes and forms.....	1,000 short tons.....	(NA)	34.1	(X)	17.1	
241100	Round or hewn wood products or stumpage.....		(X)	0.7	}	283.7	
970099	All other supplies.....		(X)	153.1			
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ³		(X)	1.2	(X)	1.8	
	Fuels used, total.....		(X)	34.3	(X)	23.1	
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft.	34,780.8	17.1	11,717.0	(NA)	
291141	Fuel oil.....	1,000 bbls.....	1,499.1	6.7	2,654.0	(NA)	
291151							
977000	Undistributed fuels ³		(X)	0.4	(X)	(NA)	
	Mines with treatment plants:						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	191.7	(X)	117.8	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	167.5	(X)	102.6	
	Ores and other iron and manganese-bearing materials for preparation:						
100093	Crude ores produced and prepared at same establishment.	Million long tons.....	127.2	(X)	(NA)	(X)	
100095	Prepared ores produced and agglomerated at same establishment.....	do.....	42.6	(X)	(NA)	(X)	
353011	Purchased machinery installed.....		(X)	40.3	(X)	14.7	
	Supplies used:						
970099	All other supplies.....		(X)	126.5	}	87.8	
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ³		(X)	0.7			
	Fuels used, total.....		(X)	24.2			
977000	Undistributed fuels ³		(X)	0.3	(X)	(NA)	

Note: Detail may not add to totals due to independent rounding.

Standard Notes: (NA) Not available. (X) Not applicable. (D) Withheld to avoid disclosing figures for individual companies.

¹Includes the cost of products bought and resold without further processing.²Included with all other supplies.³This item represents the total cost of supplies or fuels for establishments that did not report detailed cost data. For 1967 this also includes estimates for establishments that were not mailed report forms.

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both “gross” and “net” shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total “value of shipments and receipts” for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

“Value of shipments” used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

“Capital expenditures” used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



MIC67(1)-10B

INDUSTRY SERIES

COPPER, LEAD, ZINC, GOLD, AND SILVER ORES

SIC code	Industry
1021	Copper ores
1031	Lead and zinc ores
1042	Lode gold
1043	Placer gold
1044	Silver ores

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	6
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963	9
3A Detailed Statistics, by Geographic Area: 1967	11
3B Detailed Statistics, by Selected Types of Operations: 1967	14
4 General Statistics, by Employment Size of Establishment: 1967	15
5A Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	17
5B Ores Mined and Gross Metal Content of Shipments: 1967	18
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	19
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	22
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

COPPER, LEAD, ZINC, GOLD, AND SILVER ORES

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Groups 102, Copper Ores; 103, Lead and Zinc Ores; and 104, Gold and Silver Ores. The separate industries included in these groups are as follows:

SIC Code and Title

1021--Copper Ores
1031--Lead and Zinc Ores
1042--Lode Gold
1043--Placer Gold
1044--Silver Ores

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1021--Copper Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing copper ores. This industry also includes establishments primarily engaged in the recovery of copper concentrates by precipitation and leaching of copper ore. Establishments primarily engaged in the recovery of refined copper by leaching copper concentrates are classified in Major Group 33, Primary Metal Industries.

Industry 1031--Lead and Zinc Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing lead ores, zinc ores, or lead-zinc ores. The lead ores subindustry represents establishments at which the principal metal contained in ores mined or milled, measured by value, was lead. The zinc ores subindustry represents establishments at which the principal metal contained in ores mined or milled, measured by value, was zinc.

Industry 1042--Lode Gold. This industry represents establishments primarily engaged in mining gold ores from lode deposits. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine or mill site.

Industry 1043--Placer Gold. This industry represents establishments primarily engaged in recovery of gold from placer deposits by any method. This industry includes the production of bullion at the mine, mill, or dredge site.

Industry 1044--Silver Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing silver ores. The production of bullion at the mine or mill site is included.

Establishments producing complex ores were classified in these industries or subindustries on the basis of the relative values of metals contained (gross content) in the products of such establishments. For example, establishments were classified in the Copper Ores Industry if the estimated value of the gross copper content of minerals produced or shipped was greater than for any of the other metals contained. In order to arrive at this classification, unit values f.o.b. mine or mill for copper, lead, zinc, gold, and silver were applied to the reported gross metal content of products to derive the total

value for each metal contained. The individual unit values used were based on the f.o.b. mine or mill values of ores, concentrates, precipitates, and mill bullion reported in the 1963 Census of Mineral Industries, adjusted to reflect the changes in the metal prices between 1963 and 1967. These adjusted unit values f.o.b. mine or mill used for classification purposes in the 1967 minerals census were as follows:

Product	Estimated 1967 unit value f.o.b. mine or mill
COPPER	
Ores for shipment to:	
Smelters.....	\$0.171 per pound
Mills.....	\$0.130 per pound
Concentrates.....	\$0.266 per pound
Precipitates.....	\$0.251 per pound
LEAD	
Ores for shipment to:	
Smelters.....	\$0.102 per pound
Mills.....	\$0.057 per pound
Concentrates.....	\$0.099 per pound
ZINC	
Ores for shipment to:	
Smelters.....	\$0.039 per pound
Mills.....	\$0.022 per pound
Concentrates.....	\$0.065 per pound
GOLD	
Concentrates.....	\$34.32 per fine ounce
Mill bullion.....	\$35.00 per fine ounce
SILVER	
Concentrates.....	\$1.38 per fine ounce
Mill bullion.....	\$1.51 per fine ounce

SUMMARY OF FINDINGS

The total value of shipments and receipts of the copper, lead, zinc, gold, and silver ores industries in the United States in 1967 was \$890.4 million. The total value of shipments and receipts of the Copper Ores Industry in 1967 amounted to \$675.9 million, of which the value of primary products of this industry was \$648.5 million. The total value of shipments and receipts of the lead and Zinc Ores Industry in 1967 was \$151.2 million, of which primary products of the industry amounted to \$149.8 million. The total value of shipments and receipts in 1967 for Industry Group 104, Gold and Silver Ores, was \$63.3 million. Of the total value of shipments and receipts the primary products in the Lode Gold Industry accounted for \$41.4 million, and the Silver Ores Industry accounted for \$17.9 million.

The figures above represent gross value of shipments and receipts and contain duplication because of the inclusion of the value of minerals transferred between establishments

within these industries for treatment, as well as the value of the materials treated from such transferred minerals. For the Copper Ores Industry in 1967 for example, the value of minerals transferred to other establishments for treatment was \$114.1 million, or 17 percent of the gross value of shipments. In the Lead and Zinc Ores Industry, the value of milling ores shipped was \$15.3 million, or 10 percent of the gross value of shipments. Separate figures for the value of gross and net shipments are given in tables 1, 3, and 5A of this report.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments classified in the industry, but also their activities in the production of secondary products and in the performance of contract services for others. This situation should be taken into account in comparing industry statistics (tables 1 to 4 and 7 with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry or subindustry and also the value of net shipments of primary products of the specified industry produced as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Copper Ores, Lead and Zinc Ores, and Gold and Silver Ores Industries are comparable, in part, with statistics on these products published by the Bureau of Mines. The differences which occur result principally from differences in data collected, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are summarized below:

- (1) Census statistics on crude ores for these industries represent all ores mined by establishments classified in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries, separate totals being available for each of the four industries. Figures do not include materials bearing such metals produced in other industries, nor do they differentiate between various types of ores which may be produced at the same establishment, such as lead ores which might be produced as a secondary product at an establishment classified in the Silver Ores Industry. Bureau of Mines figures for tonnage of crude ores represent ores of specified types (usually determined by assay content of the ores) irrespective of where these ores were produced. Nevertheless, as indicated in the table below, the Census Bureau figures based on a classification of all ores mined at each establishment are roughly comparable to the figures for groups of specified ores as tabulated by the Bureau of Mines.
- (2) Census figures for metals contained in all ores, concentrates, and bullion for 1967 represent gross metal content as reported by the respondent. Figures published by the Bureau of Mines represent recoverable metal content. This is the principal reason for the differences between the figures from the two bureaus shown below for metal content of copper, lead, zinc, gold, and silver bearing materials.
- (3) Census value figures represent reported values of ores, concentrates, and bullion f.o.b. mine or mill. Bureau of Mines value figures are estimated on the basis of recovered metals prices, thus measuring the value of these metals as they come from the smelter or refinery rather than at the mine and mill level.
- (4) Bureau of the Census figures for milled or treated products include materials produced from foreign ores. Bureau of Mines product statistics represent domestic ores only.

(5) The Bureau of Mines excluded from its 1967 statistics shipments made in January of that year if such shipments had been included in their 1966 statistics. Likewise, any shipments actually made during 1966 but not included in Bureau of Mines figures for that year, were added to the 1967 figures. Census statistics represent only mine or mill shipments in 1967.

(6) The Bureau of Mines includes metals recovered at smelters from old slag and smelter cleanings if that metal was not included in their statistics for earlier years. Only metals contained in ores mined or milled in 1967 are included in Census statistics.

(7) The Bureau of the Census excludes single unit establishments with no paid employees. The Bureau of Mines includes all reports obtained, regardless of size. However, the contribution to products of such establishments is very small.

(8) Some differences in the State statistics result from the assignment by the Bureau of Mines of concentrates produced in one State from ores mined in another to the State in which the mine is located. Census statistics include such concentrates in the State where the mill is located.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure for "quantity"	Bureau of the Census statistics			Bureau of Mines statistics		
		Production (quantity)	Shipments including interplant transfers		Production (quantity)	Shipments	
			Quantity	Value (\$1,000)		Quantity (recoverable)	Value (\$1,000)
Copper, lead, zinc, gold, and silver ores (production and net shipments...	1,000 short tons..	148,300.0	(NA)	(NA)	150,591	(NA)	(NA)
Metal content of copper, lead, zinc, gold, and silver-bearing materials: ²							
Copper.....	1,000 pounds.....	1,908,869.0	(NA)	(NA)	1,908,128.0	(NA)	³ 229,401.0
Lead.....	.....do.....	616,668.0	(NA)	(NA)	658,562.0	(NA)	³ 85,741.0
Zinc.....	.....do.....	1,121,419.0	(NA)	(NA)	1,085,826.0	(NA)	³ 151,562.0
Gold.....	1,000 fine ounces.	1,570.0	(NA)	(NA)	1,539.0	(NA)	³ 55,447.0
Silver.....	.....do.....	(D)	(NA)	(NA)	32,345.0	(NA)	³ 50,135.0
Copper ores:							
Crude ore mined in the Copper Ores Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	127,500.0	copper-	4,300.0	⁴ 127,066.0	copper-	(NA)
Copper concentrates.....		3,000.0	1,591,442.0	459,800.0	(NA)	1,608,028.0	(NA)
Copper precipitates (Metal content).....		(NA)	301,457.0	76,600.0	(NA)	255,009.0	(NA)
Lead and zinc ores:							
Crude ore mined in the lead and Zinc Ores Industry (production and net shipments).....	Shipments--1,000 pounds of metal contained.	17,100.0	lead-	6,500.0	⁵ 19,385.0	lead-	(NA)
Lead concentrates.....		400.0	572,005.0	60,800.0	(NA)	5,612,076.0	(NA)
Zinc concentrates.....		900.0	1,129,211.0	77,200.0	(NA)	1,033,850.0	(NA)
Lode gold:							
Crude ore mined in the Lode Gold Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	3,200.0			⁶ 3,233.0	gold-	(NA)
Gold concentrates.....		(NA)	1,156.0	4,100.0	(NA)	⁷ 76.3	(NA)
Mill bullion.....		(NA)			(NA)	⁸ 1,010.6	(NA)
Placer gold.....							
1,000 fine ounces.		63.8	63.8	2,200.0	65.0	(NA)	³ 2,269.0
Silver ores:							
Crude ore mined in the Silver Ores Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	700.0			⁹ 904.0	silver-	(NA)
Silver concentrates and mill bullion.....		(NA)	14,915.7	20,000.0	(NA)	¹⁰ 12,303.0	(NA)

(NA) Not available.

¹Represents only ores mined in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries.

²Census quantity figures represent gross metal content, Bureau of Mines quantity figures represent recoverable metal content of mine production.

³Estimated by the Bureau of Mines from the quantity of mine production and an average price. For copper, lead, and zinc, represents the weighted average unit price of domestic refined metals delivered to purchasers. For gold, represents the price under authority of the Gold Reserve Act of January 31, 1944. For silver, represents the Treasury buying price for newly mined silver.

⁴Represents copper ore sold or treated.

⁵Represents lead ore, zinc ore, lead-zinc ore, and copper-lead, copper-zinc, and copper-lead-zinc ores.

⁶Represents gold ore and gold-silver ore produced.

⁷Represents metal contained in gold ore and gold-silver ore produced less mill bullion produced.

⁸Represents production.

⁹Represents silver ore and old tailings produced.

¹⁰Represents metal contained in silver ore.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Selected expenses					Value of shipments and receipts	Value of net shipments and receipts	Quantity of primary products ¹	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	Value added in mining	Supplies, fuels, and purchased electric energy	Minerals received for treatment or agglomeration	Contract work	Purchased machinery installed				
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)		(million dollars)
INDUSTRY 1021.--COPPER ORES																	
1967 ^{2 3}	(NA)	156	62	20.9	170.9	15.0	32.5	114.6	436.5	138.3	114.0	27.9	81.4	675.9	561.5	127.5	122.1
1963.....	118	160	41	26.5	187.3	21.4	45.3	142.4	417.1	134.2	129.8	30.5	45.6	670.2	544.2	145.3	87.1
1958 ⁴	112	148	38	27.6	143.5	20.9	41.0	106.4	266.5	105.8	89.0	22.0	19.2	457.6	374.4	112.0	44.9
1954 ⁵	179	210	41	27.8	136.1	21.5	46.7	98.5	334.9	87.7	100.7	43.9	23.8	508.7	409.9	91.0	82.2
1939 ^{6 7}	35	⁸ 51	(NA)	26.8	42.6	23.8	51.2	34.5	108.5	32.6	(NA)	0.5	(NA)	145.6	141.6	52.1	(NA)
1929 ^{6 7}	(NA)	143	(NA)	⁹ 48.0	⁹ 83.3	44.5	(NA)	73.2	221.7	59.2	(NA)	2.6	13.1	¹⁰ 283.5	283.5	(NA)	(NA)
1919 ^{7 11}	(NA)	227	(NA)	48.7	78.3	45.4	(NA)	69.9	138.4	52.0	1.5	0.9	(NA)	192.8	191.2	(NA)	(NA)
1909 ⁸	196	223	(NA)	54.7	54.0	52.6	(NA)	50.1	86.4	37.4	10.6	0.7	(NA)	135.1	124.5	(NA)	(NA)
1902.....	159	¹² 159	(NA)	27.6	23.2	¹³ 26.3	(NA)	21.3	39.8	11.2	(Z)	0.2	(NA)	51.2	51.2	11.8	(NA)
1889 ¹⁴	(NA)	(NA)	(NA)	8.8	6.2	8.5	(NA)	5.8	15.3	4.1	(NA)	0.3	(NA)	¹⁰ 19.7	19.7	3.3	(NA)
1880 ⁸	(NA)	¹² 42	(NA)	6.3	3.2	6.0	(NA)	(NA)	7.5	1.4	(NA)	(NA)	(NA)	¹⁰ 8.9	8.9	1.0	(NA)
1870 ⁸	(NA)	40	(NA)	5.4	2.7	(NA)	(NA)	(NA)	4.6	0.6	(NA)	(NA)	(NA)	¹⁰ 5.2	5.2	(NA)	(NA)
1860 ⁸	(NA)	47	(NA)	5.2	1.8	(NA)	(NA)	(NA)	2.9	¹⁵ 0.5	(¹⁵)	(NA)	(NA)	3.4	(NA)	(NA)	(NA)
INDUSTRY 1031.--LEAD AND ZINC ORES																	
1967, total.....	(NA)	167	57	9.1	60.9	7.5	15.0	46.2	102.6	48.2	(¹⁵)	20.8	16.7	151.2	135.8	17.1	43.8
Lead ores.....	(NA)	104	22	4.2	30.6	3.3	6.7	21.9	36.9	29.4	(¹⁵)	18.4	11.7	65.5	53.4	(NA)	34.2
Zinc ores.....	(NA)	63	35	4.9	30.3	4.1	8.3	24.3	65.7	18.8	(¹⁵)	2.4	5.0	85.6	82.4	(NA)	9.5
1963, total.....	163	205	46	9.4	49.3	7.8	14.8	37.9	84.4	29.5	26.1	3.6	4.3	136.0	119.8	14.2	11.9
Lead ores.....	117	125	13	4.3	21.9	3.4	5.9	15.3	34.0	¹⁵ 18.4	(¹⁵)	2.5	1.9	50.7	44.8	4.6	6.1
Zinc ores.....	50	80	33	5.1	27.4	4.4	8.8	22.6	50.3	¹⁵ 37.3	(¹⁵)	1.1	2.4	85.2	75.0	9.6	5.8
1958, total ⁴	226	288	52	11.2	54.4	8.7	16.7	39.0	73.7	28.1	21.5	3.0	2.9	120.6	103.8	14.4	8.6
Lead ores ⁴	194	211	26	6.9	33.8	5.5	10.4	24.8	48.0	17.0	11.4	2.1	1.6	75.6	68.1	8.8	4.5
Zinc ores.....	42	77	26	4.3	20.6	3.3	6.3	14.2	25.7	11.1	10.2	0.8	1.3	45.0	35.7	5.6	4.1
1954, total.....	411	520	90	16.6	71.4	13.6	27.6	53.7	107.4	32.9	35.1	6.1	5.9	175.9	140.1	18.5	11.5
Lead ores.....	302	343	41	8.7	39.0	7.2	14.7	29.5	62.7	14.2	14.2	2.8	2.9	94.9	77.2	9.7	5.2
Zinc ores.....	118	177	49	7.8	32.4	6.4	12.9	24.1	44.7	15.5	20.9	3.3	3.1	81.1	62.9	8.8	6.4
1939, total ⁷	208	¹² 260	(NA)	17.7	25.3	15.7	32.5	20.3	47.3	15.0	(NA)	0.4	(NA)	72.6	62.7	16.3	(NA)
Lead ores.....	72	¹² 86	(NA)	8.1	12.8	7.0	14.2	10.0	24.3	7.0	(NA)	0.1	(NA)	34.5	31.5	7.0	(NA)
Zinc ores.....	143	¹² 174	(NA)	9.7	12.5	8.7	18.3	10.3	23.0	7.9	(NA)	0.2	(NA)	38.1	31.2	9.3	(NA)
1929, total ⁷	(NA)	303	(NA)	⁹ 27.7	⁹ 44.2	25.9	(NA)	39.2	84.8	26.0	(NA)	1.7	3.8	¹⁰ 112.4	112.4	(NA)	(NA)
Lead ores.....	(NA)	155	(NA)	⁹ 15.0	⁹ 25.5	14.0	(NA)	22.9	51.7	14.8	(NA)	1.0	1.9	¹⁰ 67.6	67.6	(NA)	(NA)
Zinc ores.....	(NA)	148	(NA)	⁹ 12.8	⁹ 18.8	11.9	(NA)	16.3	33.1	11.2	(NA)	0.6	1.8	¹⁰ 44.9	44.9	(NA)	(NA)
1919 ⁷	(NA)	432	(NA)	23.6	34.5	21.9	(NA)	30.7	53.6	20.7	0.4	0.9	(NA)	75.6	75.2	(NA)	(NA)
1909 ¹⁶	1,040	1,040	(NA)	17.8	11.7	17.0	(NA)	10.6	21.9	7.3	1.9	0.3	(NA)	31.4	29.4	(NA)	(NA)
1902 ¹⁶	582	¹² 584	(NA)	8.9	5.2	¹³ 8.0	(NA)	4.4	12.0	2.5	0.1	0.1	(NA)	14.7	14.6	(NA)	(NA)
1889 ¹⁷	(NA)	(NA)	(NA)	3.2	1.2	3.1	(NA)	1.2	4.4	0.4	(NA)	(Z)	(NA)	⁵ 4.8	4.8	(NA)	(NA)
1880 ^{8 18}	(NA)	¹² 206	(NA)	7.5	2.6	7.1	(NA)	(NA)	3.5	0.3	(NA)	(NA)	(NA)	¹⁰ 3.8	3.8	(NA)	(NA)
1870, total ⁸	(NA)	127	(NA)	1.7	0.6	(NA)	(NA)	(NA)	1.4	0.1	(NA)	(NA)	(NA)	¹⁰ 1.5	1.5	(NA)	(NA)
Lead ores.....	(NA)	112	(NA)	1.1	0.4	(NA)	(NA)	(NA)	0.7	(Z)	(NA)	(NA)	(NA)	¹⁰ 0.7	0.7	(NA)	(NA)
Zinc ores.....	(NA)	15	(NA)	0.6	0.3	(NA)	(NA)	(NA)	0.7	(Z)	(NA)	(NA)	(NA)	¹⁰ 0.8	0.8	(NA)	(NA)
1860 ⁸	(NA)	43	(NA)	0.2	0.1	(NA)	(NA)	(NA)	0.2	¹⁵ 0.2	(¹⁵)	(NA)	(NA)	0.4	0.4	(NA)	(NA)
GROUP 104.--GOLD AND SILVER ORES																	
1967 ²	(NA)	183	15	3.8	25.5	3.2	6.9	20.2	51.4	13.4	-	0.7	2.2	63.3	63.3	3.9	4.4
1963.....	459	466	15	4.2	24.8	3.6	7.6	20.0	49.0	¹⁵ 14.5	(¹⁵)	1.8	2.0	60.2	60.2	3.4	7.2
1958 ⁴	466	470	23	4.4	23.2	3.8	8.2	19.8	42.1	12.8	1.1	0.8	1.7	54.7	53.3	¹⁹ 2.9	3.8
1954.....	669	695	25	5.6	25.3	4.9	11.2	21.2	42.2	13.9	1.3	0.8	2.0	55.6	¹⁹ 53.7	2.8	4.6
1939 ^{7 11}	²⁰ 1,311	¹² 1,378	(NA)	27.6	45.1	25.1	58.7	39.0	104.8	27.7	(NA)	1.3	(NA)	142.3	133.8	13.2	(NA)
1929 ^{7 11}	(NA)	273	(NA)	⁹ 9.3	⁹ 16.0	8.5	(NA)	14.0	20.2	9.0	(NA)	0.7	1.9	(NA)	29.9	(NA)	(NA)
1919 ^{7 11}	(NA)	1,148	(NA)	18.9	30.4	17.3	(NA)	26.8	44.5	21.2	4.7	1.4	(NA)	71.8	67.1	(NA)	(NA)
1909 ⁸	6,127	6,139	(NA)	50.0	56.3	45.6	(NA)	43.3	66.7	30.9	6.5	6.5	(NA)	110.5	104.0	(NA)	(NA)
1902 ¹¹	6,244	¹² 6,244	(NA)	53.7	55.1	¹³ 47.9	(NA)	47.7	58.1	21.8	6.4	2.2	(NA)	88.5	82.5	9.8	(NA)
1889.....	(NA)	¹⁴ 750	(NA)	57.3	41.8	53.5	(NA)	37.7	84.0	13.8	(NA)	1.4	(NA)	(NA)	99.3	4.6	(NA)
1880 ⁸	(NA)	¹² 989	(NA)	20.2	12.9	18.9	(NA)	(NA)	² 172.4	²² 4.7	(NA)	(NA)	(NA)	(NA)	79.2	2.2	(NA)
1870 ⁸	(NA)	2,377	(NA)	16.9	8.8	(NA)	(NA)	(NA)	22.4	4.1	(NA)	(NA)	(NA)	(NA)	26.5	(NA)	(NA)
1860 ⁸	(NA)	7,208	(NA)	44.6	23.7	(NA)	(NA)	(NA)	31.5	¹⁵ 16.7	(¹⁵)	(NA)	(NA)	48.2	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Selected expenses					Value of shipments and receipts	Value of net shipments and receipts	Quantity of primary products ¹	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	Value added in mining	Supplies, fuels, and purchased electric energy	Minerals received for treatment or agglomeration	Contract work	Purchased machinery installed				
(number)	(number)	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
INDUSTRY 1042.--LODE GOLD																	
1967.....	(NA)	77	6	2.4	16.2	2.0	4.6	12.9	33.3	8.9	-	0.3	1.3	42.3	42.3	3.2	1.5
1963.....	199	201	5	2.4	13.9	2.1	4.5	11.4	21.3	6.7	-	0.9	0.5	26.6	26.6	2.5	2.9
1958 ⁴	242	244	12	2.6	12.4	2.2	4.6	10.7	22.7	¹⁵ 7.4	(¹⁵)	0.4	0.8	29.5	28.2	2.4	1.7
1954.....	301	313	15	3.1	12.5	2.7	6.0	10.6	22.0	²³ 11.4	1.3	²³ 0.4	0.9	28.7	²³ 26.9	2.2	2.2
1939 ⁷ ¹¹	851	¹² 872	(NA)	19.3	31.4	17.6	41.5	27.3	66.5	18.5	(NA)	1.0	(NA)	92.9	86.1	11.3	(NA)
1929 ⁷ ¹¹	(NA)	174	(NA)	⁹ 5.8	⁹ 9.8	5.4	(NA)	8.7	11.7	5.4	(NA)	0.6	1.1	¹⁰ 17.6	17.7	(NA)	(NA)
1919 ⁷ ¹¹ ²⁴	(NA)	740	(NA)	16.8	26.8	15.4	(NA)	23.8	35.9	17.0	4.7	1.2	(NA)	58.8	54.2	(NA)	(NA)
1909 ⁸ ¹⁶ ²⁴	4,717	4,729	(NA)	44.2	48.4	40.3	(NA)	42.6	50.1	26.2	6.5	4.8	(NA)	87.5	81.0	(NA)	(NA)
1902 ¹¹ ²⁵ ¹⁶ ²⁴	5,269	¹²⁵ 269	(NA)	51.1	52.9	¹³ 45.6	(NA)	45.8	53.6	21.0	6.4	2.1	(NA)	83.1	77.2	²⁶ 9.8	(NA)
1880 ⁸ ²⁴	(NA)	² 640	(NA)	²⁷ 19.1	²⁷ 12.3	17.8	52.0	(NA)	62.4	4.7	(NA)	(NA)	(NA)	¹⁰ 67.1	67.1	2.2	(NA)
1870 ⁸ , ²⁸	(NA)	281	(NA)	5.4	4.6	(NA)	(NA)	(NA)	11.7	1.7	(NA)	(NA)	(NA)	¹⁰ 13.4	13.4	(NA)	(NA)
1860 ⁸ , ²³ , ²⁸	(NA)	7,202	(NA)	44.3	23.7	(NA)	(NA)	(NA)	30.6	¹⁵ 16.6	(¹⁵)	(NA)	(NA)	47.2	(NA)	(NA)	(NA)
INDUSTRY 1043.--PLACER GOLD																	
1967.....	(NA)	48	2	0.2	1.1	0.2	0.4	0.9	2.1	0.6	-	(Z)	0.1	2.5	2.5	63.8	0.3
1963.....	155	158	2	0.4	2.1	0.3	0.7	1.8	5.8	2.0	-	0.3	0.4	7.5	7.5	¹ 193.7	1.0
1958.....	164	165	6	0.8	5.0	0.8	1.9	4.2	9.1	3.6	(X)	0.2	0.6	12.6	12.6	362.1	0.9
1954.....	271	281	7	1.3	6.7	1.2	3.0	5.6	10.3	(²³)	(X)	(²³)	0.7	14.8	14.8	²⁹ 416.2	1.3
1939 ⁷ ¹¹	307	¹² 340	(NA)	3.7	6.8	3.2	8.1	5.6	21.9	6.0	(X)	0.1	(NA)	28.0	28.0	824.6	(NA)
1929 ⁷ ¹¹	(NA)	32	(NA)	⁹ 0.7	⁹ 1.2	0.6	(NA)	1.0	2.6	1.2	(X)	(Z)	0.4	3.8	3.8	(NA)	(NA)
1919 ⁷ ¹¹	(NA)	408	(NA)	2.1	3.6	1.9	(NA)	3.0	8.6	4.2	(X)	0.1	(NA)	12.9	12.9	³⁰ 651.4	(NA)
1909 ⁸	1,410	1,410	(NA)	5.8	8.0	5.3	(NA)	7.3	16.6	4.7	(X)	1.7	(NA)	23.0	23.0	(NA)	(NA)
1902 ¹¹ ²⁵	975	¹² 975	(NA)	2.6	2.1	¹³ 2.3	(NA)	1.8	4.5	0.8	(X)	(Z)	(NA)	5.3	5.3	259.1	(NA)
1880 ⁸	(NA)	¹² 349	(NA)	1.1	0.6	1.1	(NA)	0.6	(NA)	(NA)	(X)	(NA)	(NA)	12.1	12.1	580.8	(NA)
1870 ⁸ ²⁸	(NA)	1,994	(NA)	10.4	3.4	(NA)	(NA)	(NA)	7.9	1.9	(X)	(NA)	(NA)	¹⁰ 9.8	9.8	(NA)	(NA)
INDUSTRY 1044.--SILVER ORES																	
1967.....	(NA)	58	7	1.2	8.2	1.0	1.9	6.4	16.0	3.9	-	0.4	0.8	18.5	18.5	700	2.6
1963.....	105	107	8	1.5	8.8	1.2	2.3	6.8	21.9	¹⁵ 5.7	(¹⁵)	0.5	1.2	26.1	26.1	916	3.3
1958.....	60	61	5	1.0	5.8	0.9	1.7	4.8	10.4	¹⁵ 2.9	(¹⁵)	0.2	0.3	12.6	12.4	496	1.2
1954.....	98	101	3	1.3	6.0	1.1	2.2	5.0	9.9	2.5	(Z)	0.4	0.4	12.1	12.1	514	1.1
1939.....	153	¹² 166	(NA)	4.6	6.9	4.3	9.1	6.0	16.3	3.3	(NA)	0.1	(NA)	21.3	19.7	1,826	(NA)
1929 ²⁴	(NA)	67	(NA)	⁹ 2.8	⁹ 4.9	2.6	(NA)	4.3	5.9	2.4	(NA)	0.1	0.4	¹⁰ 8.5	8.5	(NA)	(NA)
1870.....	(NA)	102	(NA)	1.1	0.8	(NA)	(NA)	(NA)	2.8	0.5	(NA)	(NA)	(NA)	¹⁰ 3.2	3.2	(NA)	(NA)
1860.....	(NA)	6	(NA)	0.3	0.1	(NA)	(NA)	(NA)	0.9	¹⁵ 0.1	(¹⁵)	(NA)	(NA)	1.0	(NA)	(NA)	(NA)

Note: Detailed figures may not add to the totals because of independent rounding.

Standard notes: -Represents zero. (X) Not Applicable. (Z) Less than \$50 thousand.

¹Represents millions of short tons for the Copper Ores, Lead and Zinc Ores, and Lode Gold Industries. For the Placer Gold Industry, represents thousands of fine ounces of placer gold shipped. For groups of industries, excludes figures for placer gold. For the Silver Ores Industry, represents, thousands of short tons. For the Copper Ores Industry, in 1963 includes ore valued chiefly for copper produced in other industries. For 1919, includes the U.S. Bureau of Mines figure for production of copper ores and siliceous ores in Alaska.

²In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, in the Copper Ores Industry, there were 41 establishments without paid employees however, they accounted for less than 1 percent of the industry's value added. In the Lead and Zinc Ores Industry there were 46 establishments without paid employees; however, they accounted for less than 1 percent of the industry's value added. In the Lode Gold Industry there were 80 establishments without paid employees; however, they accounted for less than 1 percent of the industry's value added. In the Placer Gold Industry there were 100 establishments without paid employees; however, they accounted for less than 15 percent of the industry's value added. In the Silver Ores Industry there were 50 establishments without paid employees; however, they accounted for less than 1 percent of the industry's value added.

³Reflects a substantial decrease in activity caused by a labor strike during most of the second half of 1967 which affected all but a few copper mining and milling operations.

⁴Excludes data for copper ores, lead ores, and lode gold in Alaska. For 1958 the following numbers of establishments were reported in Alaska: copper ores, 9 (with 6 employees); lead ores, 2 (with 0-4 employees); lode gold, 7 (with 0-4 employees).

⁵Excludes data for 2 copper ores establishments in Alaska with less than 15 employees.

⁶Excludes data for Alaska.

⁷Excludes some nonproducing operations for which statistics are available only for the copper, lead, zinc, gold, and silver ores industries as a group. For 1939, 9 such nonproducing operations with 46 employees and with wages, salaries, and selected expense of \$92 thousand were reported. For 1929, 783 such establishments were reported with wages, salaries, and selected expenses of \$13,128 thousand; and for 1919 there were 500 such establishments with such expenses of \$13,055 thousand.

⁸Includes some smelting and refining operations. For 1909, production, development, and exploration workers at copper smelters represented about 13 percent of the total shown for such workers in the Copper Ores Industry, and production, development, and exploration workers at lead and zinc smelters and refineries represented about 3 percent of the total shown for such workers in the lead and Zinc Ores Industry.

⁹Excludes data for central administrative offices operated separately from mines or plants.

¹⁰Represents value of net shipments and receipts.

¹¹Excludes data for Alaska. For 1919, data for lode gold mining in Alaska are included with those for copper ores.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

Footnotes for Industry 10B--Continued

- ¹²Represents number of mines.
- ¹³Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.
- ¹⁴Represents statistics for Michigan, Montana, New Mexico, and Arizona only. Over 90 percent of the copper contained ores was produced in these States.
- ¹⁵The cost of minerals received for treatment is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.
- ¹⁶Data for establishments primarily argentiferous lead and zinc ores are included with those for gold and silver ores.
- ¹⁷Represents New Jersey, Pennsylvania, Illinois, Wisconsin, Iowa, Missouri, Kansas, Virginia, Tennessee, Arkansas, and New Mexico. Except for value of shipments, excludes lead mining in Illinois, Virginia, Tennessee, and Arkansas (products valued at \$16 thousand) and zinc mining in Iowa, Missouri, Arkansas, and New Mexico (products valued at \$2,033).
- ¹⁸Represents mines east of the 100th meridian only.
- ¹⁹Excludes data for lode gold in Alaska.
- ²⁰Represents the sum of the figures shown for the separate industries and probably includes some duplication due to the same company operating in more than one industry.
- ²¹Includes an estimate of \$10 million for value added in mining at placer gold establishments.
- ²²Excludes data for placer gold establishments.
- ²³For 1954 and 1860 data for placer gold are included with lode gold.
- ²⁴In 1919, 1909, 1902, and 1880 data for the Silver Ores Industry were combined and shown with the Lode Gold Industry.
- ²⁵Only combined figures are available for all of the 3,252 nonproducing gold mines reported for 1902. Data for all of these mines are included with the figures for producing lode gold and silver ores operations (See 1963 Census of Mineral Industries, Volume I).
- ²⁶Represents ore sold or treated, including milling ores, but excluding the production of "certain small operators, from whom no individual reports were received."
- ²⁷Figures for number of employees include, but figures for wages and salaries exclude, data for 732 employees reported as "staff." Many of these persons may have been proprietors.
- ²⁸Figures for 1870 are probably understated and those for 1860 are probably overstated. For 1870, no estimates were made for missing reports. For 1860, estimates were made for about 5,000 apparently missing reports and the figures also include data for refineries and assay establishments.
- ²⁹Includes small quantities of gold recovered from placer gravels by establishments classified in other industries.
- ³⁰Represents fine ounces, including for Alaska the U.S. Bureau of Mines figure for placer gold production.

TABLE 2. General Statistics by Geographic Area and Type of of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1021.--COPPER ORES ¹													
Geographic Area													
United States, total.....	156	62	20.9	170.9	15.0	32.5	114.6	436.5	361.6	675.9	122.1	26.5	417.1
Producing establishments, total.....	126	56	20.5	167.8	14.7	31.8	112.3	451.8	330.4	675.9	106.2	24.3	417.0
Mines with treatment plants.....	27	24	10.8	86.3	8.2	18.4	63.8	293.0	129.6	360.5	62.0	12.5	239.8
Open-pit.....	20	17	6.5	55.2	5.0	11.8	39.8	220.2	96.7	277.9	39.0	7.4	184.6
Underground ²	7	7	4.3	31.1	3.2	6.6	24.0	72.8	32.9	92.6	23.0	5.1	55.2
Undistributed.....	26	15	2.0	22.1	-	-	-	-	-	-	-	(NA)	(NA)
Nonproducing establishments.....	30	6	0.4	3.1	0.4	0.7	2.4	-15.4	31.3	-	15.9	0.2	0.1
Mountain Division, total.....	110	46	16.6	140.2	12.5	28.0	100.2	387.4	333.7	613.5	107.6	(NA)	(NA)
Producing establishments, total.....	89	43	16.4	138.0	12.3	27.5	98.5	403.4	304.6	613.5	94.5	(NA)	(NA)
Mines with treatment plants.....	22	20	8.5	73.7	6.4	15.2	52.9	252.5	111.9	311.3	53.0	(NA)	(NA)
Undistributed.....	12	8	0.8	8.2	-	-	-	-	-	-	-	(NA)	(NA)
Nonproducing establishments.....	21	3	0.3	2.2	0.2	0.5	1.8	-16.1	29.1	-	13.0	(NA)	(NA)
INDUSTRY 1031.--LEAD AND ZINC ORES													
Geographic Area													
United States, total.....	167	57	9.1	60.9	7.5	15.0	46.2	102.6	92.4	151.2	43.8	9.4	84.4
Lead Ores Subindustry.....	104	22	4.2	30.6	3.3	6.7	21.9	36.9	62.9	65.5	34.2	4.3	34.0
Zinc Ores Subindustry.....	63	35	4.9	30.3	4.1	8.3	24.3	65.7	29.4	85.6	9.5	5.1	50.3
Producing establishments, total.....	148	53	8.9	59.1	7.3	14.6	45.1	104.8	58.9	151.2	12.5	8.9	84.6
Mines only, total.....	99	7	1.4	8.9	1.3	2.5	7.6	17.7	5.0	21.7	1.0	(NA)	(NA)
Lead ores subindustry.....	70	4	1.0	6.5	0.9	1.8	5.6	12.8	3.6	15.6	0.9	(NA)	(NA)
Zinc ores subindustry.....	29	3	0.4	2.4	0.3	0.7	2.0	4.8	1.4	6.1	0.1	(NA)	(NA)
Mines with treatment plants, total..	37	34	6.9	44.8	5.9	11.6	36.3	87.7	37.2	113.8	11.1	(NA)	(NA)
Lead ores subindustry.....	9	9	2.7	18.9	2.2	4.4	15.0	30.2	15.7	42.6	3.3	(NA)	(NA)
Zinc ores subindustry	28	25	4.2	25.9	3.6	7.2	21.3	57.5	21.5	71.2	7.8	(NA)	(NA)
Treatment plants only, total.....	7	5	0.3	1.6	0.2	0.4	1.2	-0.7	16.7	15.7	0.4	0.6	6.1
Undistributed.....	10	7	0.3	3.9	-	-	-	-	-	-	-	(NA)	(NA)
Nonproducing establishments.....	19	4	0.2	1.8	0.1	0.4	1.2	-2.3	33.5	-	31.2	0.2	-0.2
South Region, total.....	29	12	1.8	9.9	1.5	2.9	7.2	19.4	10.7	27.0	3.1	1.5	13.9
Lead ores subindustry.....	10	-	0.1	0.3	0.1	0.1	0.2	0.8	0.4	1.2	(Z)	(NA)	(NA)
Zinc ores subindustry.....	19	12	1.7	9.7	1.4	2.8	7.0	18.6	10.2	25.7	3.1	(NA)	(NA)
West Region, total.....	103	27	4.4	29.8	3.8	7.5	24.8	49.1	31.9	74.7	6.2	4.8	42.3
Lead ores subindustry.....	78	14	2.3	16.4	1.9	3.8	12.8	22.8	21.5	41.5	2.8	2.5	20.9
Zinc ores subindustry.....	25	13	2.1	13.5	1.9	3.7	11.9	26.2	10.5	33.3	3.4	2.3	21.4
Producing establishments.....	90	26	4.3	29.3	3.7	7.4	24.3	48.7	30.1	74.7	5.2	(NA)	(NA)
Nonproducing establishments.....	13	1	0.1	0.6	0.1	0.1	0.5	0.3	0.8	-	1.1	(NA)	(NA)
Mountain Division, total.....	88	24	4.1	28.0	3.5	7.1	23.3	45.7	31.0	70.2	5.4	(NA)	(NA)
Idaho, total.....	22	7	1.3	9.9	1.1	2.2	8.2	17.3	7.4	23.3	1.4	1.7	14.2
Colorado, total.....	12	5	1.1	6.4	1.0	2.0	5.7	14.4	4.3	17.1	1.5	(NA)	(NA)
INDUSTRY 1042.--LODE GOLD													
United States, total.....	77	6	2.4	16.2	2.0	4.6	12.9	33.3	10.5	42.3	1.5	2.4	21.3
INDUSTRY 1043.--PLACER GOLD													
United States, total.....	48	2	0.2	1.1	0.2	0.4	0.9	2.1	0.7	2.5	0.3	0.4	5.8

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Area and Type of of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

(see appendix, Explanation of Symbols)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1044--SILVER ORES													
<u>Geographic area</u>													
United States, total.....	58	7	1.2	8.2	1.0	1.9	6.4	16.0	5.1	18.5	2.6	1.5	21.9
Producing establishments.....	47	7	1.1	8.0	0.9	1.8	6.2	16.0	4.9	18.5	2.3	1.3	21.6
Nonproducing establishments.....	11	-	(Z)	0.2	(Z)	0.1	0.2	0.1	0.2	-	0.2	0.1	0.3
Mountain Division, total.....	44	7	1.1	8.0	0.9	1.8	6.3	15.8	4.9	18.3	2.4	1.4	21.7
Idaho, total.....	16	6	1.0	7.4	0.8	1.6	5.8	14.8	4.4	17.9	1.3	1.0	17.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: -Represents zero. (NA) Not available (Z) Less than one-half of the unit of measure specified.

¹Reflects a substantial decrease in activity caused by a labor strike during most of the second half of 1967 which affected all but a few copper mining and milling operations.²For 1967 includes data for one combination open pit - underground operation.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	1021.-Copper ores industry			1031.-Lead and zinc ores industry					
	United States, total	Mountain		United States, total			South		
		Division total	Arizona	All operations, total	Lead ores subindustry	zinc ores subindustry	Region, total	Lead ores subindustry	Zinc ores subindustry
Establishments, total.....number..	156	110	(D)	167	104	63	29	10	19
With 1 to 19 employees.....do....	94	64	(D)	110	82	28	17	10	7
With 20 to 99 employees.....do....	20	14	(D)	29	12	17	5	-	5
With 100 employees or more.....do....	42	32	(D)	28	10	18	7	-	7
All employees (average for the year).....1,000..	20.9	16.6	(D)	9.1	4.2	4.9	1.8	0.1	1.7
Payroll (all employees), total for year..million dollars..	170.9	140.2	(D)	60.9	30.6	30.3	9.9	0.3	9.7
Production, development, and exploration workers:									
Average for the year.....1,000..	15.0	12.5	(D)	7.5	3.3	4.1	1.5	0.1	1.4
March.....do....	24.3	21.4	(D)	7.8	3.5	4.3	1.5	0.1	1.4
May.....do....	24.0	21.1	(D)	7.8	3.5	4.3	1.5	0.1	1.4
August.....do....	7.2	4.2	(D)	7.3	3.2	4.1	1.5	0.1	1.4
November.....do....	4.7	3.4	(D)	7.0	3.1	3.9	1.4	0.1	1.3
Man-hours.....millions..	32.5	28.0	(D)	15.0	6.7	8.3	2.9	0.1	2.8
January-March.....do....	12.9	11.5	(D)	3.9	1.8	2.1	0.6	(Z)	0.6
April-June.....do....	13.0	11.6	(D)	4.0	1.8	2.2	0.7	(Z)	0.7
July-September.....do....	4.0	2.9	(D)	3.6	1.6	2.0	0.7	(Z)	0.7
October-December.....do....	2.6	2.0	(D)	3.5	1.5	2.0	0.7	(Z)	0.7
Wages.....million dollars..	114.6	100.2	(D)	46.2	21.9	24.3	7.2	0.2	7.0
Supplemental labor cost not included in payroll.....do....	25.8	23.8	(D)	6.5	2.5	4.0	1.2	(Z)	1.2
Legally required expenditures, including Social Security contributions.....do....	9.5	8.6	(D)	3.5	1.4	2.1	0.6	(Z)	0.6
Payments for voluntary program.....do....	16.3	15.2	(D)	3.1	1.1	2.0	0.6	-	0.6
Cost of supplies, etc., total.....do....	361.6	333.7	(D)	92.4	62.9	29.4	10.7	0.4	10.2
Supplies used, minerals received for preparation, and purchased machinery.....do....	306.8	286.6	(D)	63.3	40.3	23.0	8.4	0.3	8.1
Cost of resales.....do....	0.1	0.1	(D)	(Z)	-	(Z)	-	-	-
Purchased fuels consumed.....do....	7.5	5.8	(D)	1.5	0.8	0.7	0.2	(Z)	0.2
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	2,419.6	2,283.8	(D)	764.1	372.9	391.2	157.7	2.7	155.0
Cost.....million dollars..	19.2	18.1	(D)	6.7	3.4	3.3	1.2	0.1	1.1
Generated less sold.....million kw.-hrs..	545.5	309.8	(D)	16.1	5.3	10.8	(Z)	-	(Z)
Contract work.....million dollars..	27.9	23.1	(D)	20.8	18.4	2.4	0.9	(Z)	0.9
Value of shipments and receipts (including resales), total.....do....	675.9	613.7	(D)	151.2	65.5	85.6	27.0	1.2	25.7
Value of resales.....do....	0.1	0.1	(D)	(Z)	-	(Z)	-	-	-
Value added in mining.....do....	436.5	387.4	(D)	102.6	36.9	65.7	19.4	0.8	18.6
Capital expenditures (except land and mineral rights), total.....do....	122.1	107.6	(D)	43.8	34.2	9.5	3.1	(Z)	3.1
Mineral development and exploration.....do....	20.4	18.7	(D)	11.3	7.7	3.6	0.9	(Z)	0.9
New structures and additions.....do....	23.5	20.2	(D)	15.1	14.2	0.9	0.1	(Z)	0.1
New machinery and equipment.....do....	74.9	65.5	(D)	17.1	12.2	4.9	2.1	(Z)	2.1
Used plant and equipment.....do....	3.4	3.2	(D)	0.3	0.2	0.1	(Z)	(Z)	(Z)
Gross book value of fixed assets, total.....do....	1,111.3	1,016.5	(D)	322.5	194.6	127.9	36.2	1.0	35.2
Mineral properties.....do....	173.6	157.8	(D)	105.9	72.1	33.8	7.1	0.6	6.5
Building and other structures (excluding land).....do....	207.6	189.5	(D)	104.0	73.6	30.4	7.5	0.1	7.4
Machinery and equipment.....do....	730.1	669.3	(D)	112.5	48.9	63.6	21.6	0.3	21.3
Mineral development and exploration expenditures, total.....do....	27.5	25.2	(D)	17.6	11.5	6.1	1.3	(Z)	1.3
Capitalized.....do....	20.9	18.1	(D)	11.2	7.6	3.6	0.8	(Z)	0.8
Expensed.....do....	6.6	7.0	(D)	6.4	3.9	2.5	0.4	(Z)	0.4
Mineral rights and geological expenditures.....do....	5.5	5.4	(D)	2.3	1.4	0.9	0.2	(Z)	0.2
Lease and land acquisition of nonproducing acreage.....do....	1.3	1.3	(D)	0.6	0.3	0.3	(Z)	-	(Z)
Geological and geophysical.....do....	2.9	2.9	(D)	1.5	1.0	0.5	0.2	(Z)	0.2
Lease rents.....do....	1.3	1.3	(D)	0.3	0.1	0.1	-	-	-
Net shipments of primary product.....1,000 short tons..	126.5	117.9	(D)	16.9	7.2	9.7	4.8	0.2	4.6
Crude minerals mined during 1967, by ownership.....do....	126.5	117.9	(D)	16.9	7.2	9.7	4.8	0.2	4.6
Production for own account.....do....	115.1	106.6	(D)	14.7	6.3	8.4	4.7	0.2	4.5
Production for accounts of others.....do....	9.4	9.4	(D)	0.2	-	0.2	-	-	-
Royalty production.....do....	11.3	11.3	(D)	2.1	1.0	1.1	0.2	0.1	0.1
Royalties paid.....million dollars..	2.1	2.1	(D)	1.2	0.7	0.5	0.1	(Z)	(Z)
Undistributed.....1,000 short tons..	1.0	0.6	(D)	0.2	0.1	0.1	-	-	-
Man-hours worked by production, development, and exploration workers, total.....millions..	32.5	28.0	(D)	15.0	6.7	8.3	2.9	0.1	2.8
At mines, total.....do....	25.0	21.4	(D)	13.1	6.1	7.0	2.4	0.1	2.3
Underground.....do....	7.4	4.4	(D)	10.6	5.0	5.6	1.9	0.1	1.8
Open-pit.....do....	10.3	10.1	(D)	-	-	-	-	-	-
Surface (including mine shops and yards).....do....	7.3	6.8	(D)	2.6	1.1	1.5	0.5	(Z)	0.5
At preparation plants.....do....	7.6	6.6	(D)	1.9	0.6	1.3	0.5	-	0.5
Man-hours spent on exploration and development (included above).....do....	1.9	1.3	(D)	1.6	0.9	0.7	0.3	-	0.3

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1031.—Lead and zinc ores--Continued						
	West						
	Region, total	Lead ores subindustry	Zinc ores subindustry	Division total	Idaho	Colorado		Arizona
Establishments, total.....number..	102	78	25	88	22	12	(D)
With 1 to 19 employees.....do....	76	64	12	64	15	7	(D)
With 20 to 99 employees.....do....	13	8	6	12	3	2	(D)
With 100 employees or more.....do....	13	6	7	12	4	3	(D)
All employees (average for the year).....1,000..	4.4	2.3	2.1	4.1	1.3	1.1	(D)
Payroll (all employees), total for year..million dollars..	29.8	16.4	13.5	28.0	9.9	6.4	(D)
Production, development, and exploration workers:							
Average for the year.....1,000..	3.8	1.9	1.9	3.5	1.1	1.0	(D)
March.....do....	4.0	2.0	2.0	3.8	1.2	1.0	(D)
May.....do....	4.2	2.1	2.1	3.8	1.2	1.0	(D)
August.....do....	3.6	1.8	1.8	3.4	1.0	1.0	(D)
November.....do....	3.3	1.7	1.6	3.1	1.0	1.0	(D)
Man-hours.....millions..	7.5	3.8	3.7	7.1	2.2	2.0	(D)
January-March.....do....	2.2	1.1	1.1	2.0	0.6	0.5	(D)
April-June.....do....	2.0	1.0	1.0	1.9	0.6	0.5	(D)
July-September.....do....	1.8	0.9	0.9	1.7	0.5	0.5	(D)
October-December.....do....	1.6	0.8	0.8	1.5	0.5	0.5	(D)
Wages.....million dollars..	24.8	12.8	11.9	23.3	8.2	5.7	(D)
Supplemental labor cost not included in payroll.....do....	4.1	2.2	1.9	3.8	1.4	0.8	(D)
Legally required expenditures, including Social							
Security contributions.....do....	2.2	1.2	1.0	2.1	0.5	0.4	(D)
Payments for voluntary program.....do....	1.8	0.9	0.9	1.7	0.8	0.4	(D)
Cost of supplies, etc., total.....do....	31.9	21.5	10.5	30.0	7.4	4.3	(D)
Supplies used, minerals received for preparation, and purchased machinery.....do....	28.2	19.5	8.7	26.5	6.4	3.5	(D)
Cost of resales.....do....	(Z)	-	(Z)	(Z)	-	(Z)	(D)
Purchased fuels consumed.....do....	0.9	0.5	0.4	0.8	0.1	0.2	(D)
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	260.5	142.6	117.9	239.5	111.0	39.9	(D)
Cost.....million dollars..	2.4	1.3	1.1	2.1	0.7	0.4	(D)
Generated less sold.....million kw.-hrs..	14.8	4.0	10.8	9.9	(Z)	1.1	(D)
Contract work.....million dollars..	0.6	0.2	0.4	0.5	0.2	0.2	(D)
Value of shipments and receipts (including resales), total.....do....	74.7	41.5	33.3	70.2	23.3	17.1	(D)
Value of resales.....do....	(Z)	-	(Z)	(Z)	-	(Z)	(D)
Value added in mining.....do....	49.1	22.8	26.2	45.7	17.3	14.4	(D)
Capital expenditures (except land and mineral rights), total.....do....	6.2	2.8	3.4	5.4	1.4	1.5	(D)
Mineral development and exploration.....do....	3.1	1.5	1.6	2.8	1.0	0.8	(D)
New structures and additions.....do....	0.4	0.1	0.3	0.3	(Z)	0.1	(D)
New machinery and equipment.....do....	2.5	1.0	1.5	2.0	0.4	0.5	(D)
Used plant and equipment.....do....	0.2	0.2	(Z)	0.3	(Z)	0.1	(D)
Gross book value of fixed assets, total.....do....	106.9	51.1	55.8	97.9	23.9	23.1	(D)
Mineral properties.....do....	43.2	24.5	18.7	39.2	10.9	12.0	(D)
Building and other structures (excluding land).....do....	25.2	13.4	11.8	23.5	9.8	4.9	(D)
Machinery and equipment.....do....	39.5	14.1	25.4	35.2	3.2	6.3	(D)
Mineral development and exploration expenditures, total.....do....	7.2	3.8	3.4	6.6	2.9	1.6	(D)
Capitalized.....do....	3.1	1.5	1.6	2.8	0.9	0.8	(D)
Expensed.....do....	4.1	2.3	1.8	3.8	1.9	0.8	(D)
Mineral rights and geological expenditures.....do....	1.2	0.8	0.4	1.1	0.6	0.3	(D)
Lease and land aquisition of nonproducing acreage.....do....	0.6	0.3	0.3	0.6	0.3	0.3	(D)
Geological and geophysical.....do....	0.4	0.4	(Z)	0.5	0.2	(Z)	(D)
Lease rents.....do....	0.1	(Z)	0.1	0.1	0.1	-	(D)
Net shipments of primary product.....1,000 short tons..							
Crude minerals mined during 1967, by ownership.....do....	3.7	1.3	2.4	3.0	0.8	1.0	(D)
Production for own account.....do....	3.3	1.2	2.1	2.6	0.5	1.0	(D)
Production for accounts of others.....do....	0.2	-	0.2	0.2	0.1	-	(D)
Royalty production.....do....	0.3	0.1	0.2	0.3	0.1	-	(D)
Royalties paid.....million dollars..	0.5	0.3	0.2	0.4	0.2	-	(D)
Undistributed.....1,000 short tons...	(Z)	-	(Z)	0.1	-	0.1	(D)
Man-hours worked by production, development, and exploration workers, total..... millions..	7.5	3.8	3.7	7.1	2.2	2.0	(D)
At mines, total.....do....	6.7	3.5	3.2	6.4	2.1	1.7	(D)
Underground.....do....	5.6	3.1	2.5	5.7	1.7	1.4	(D)
Open-pit.....do....	-	-	-	-	-	-	(D)
Surface (including mine shops and yards).....do....	1.1	0.4	0.7	1.0	0.4	0.3	(D)
At preparation plants.....do....	0.8	0.3	0.5	0.7	0.2	0.3	(D)
Man-hours spent on exploration and development (included above).....do....	1.0	0.7	0.3	1.0	0.3	0.1	(D)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1042.—Lode gold United States, total	1043.—Placer gold United States, total	1044.—Silver ores		
			United States, total	Mountain	
				Division, total	Idaho
Establishments, total.....number..	77	48	58	44	16
With 1 to 19 employees.....do....	71	46	51	37	10
With 20 to 99 employees.....do....	2	2	4	4	3
With 100 employees or more.....do....	4	-	3	3	3
All employees (average for the year).....1,000..	2.4	0.2	1.2	1.1	1.0
Payroll (all employees), total for year..million dollars..	16.2	1.1	8.2	8.0	7.4
Production, development, and exploration workers:					
Average for the year.....1,000..	2.0	0.2	1.0	0.9	0.8
March.....do....	2.1	0.2	1.1	1.1	1.0
May.....do....	2.0	0.2	1.1	1.0	1.0
August.....do....	2.1	0.2	0.9	0.9	0.8
November.....do....	2.0	0.1	0.7	0.7	0.6
Man-hours.....millions..	4.6	0.4	1.9	1.8	1.6
January-March.....do....	1.2	0.1	0.5	0.5	0.5
April-June.....do....	1.2	0.1	0.5	0.5	0.5
July-September.....do....	1.1	0.1	0.4	0.4	0.4
October-December.....do....	1.1	0.1	0.4	0.3	0.3
Wages.....million dollars..	12.9	0.9	6.4	6.3	5.8
Supplemental labor cost not included in payroll.....do....	1.6	0.1	0.9	0.8	0.8
Legally required expenditures, including Social					
Security contributions.....do....	1.0	0.1	0.5	0.5	0.5
Payments for voluntary program.....do....	0.6	(Z)	0.3	0.3	0.3
Cost of supplies, etc., total.....do....	10.5	0.7	5.1	4.9	4.4
Supplies used, minerals received for preparation,					
and purchased machinery.....do....	8.5	0.4	4.1	4.0	3.6
Cost of resales.....do....	-	-	-	-	-
Purchased fuels consumed.....do....	0.4	0.1	0.1	0.1	0.1
Electric energy:					
Purchased:					
Quantity.....million kw.-hrs..	130.8	11.1	74.4	74.4	71.9
Cost.....million dollars..	1.3	0.1	0.5	0.5	0.5
Generated less sold.....million kw.-hrs..	30.5	2.2	0.9	0.9	0.9
Contract work.....million dollars..	0.3	(Z)	0.4	0.3	0.3
Value of shipments and receipts (including resales),					
total.....do....	42.3	2.5	18.5	18.3	17.9
Value of resales.....do....	-	-	-	-	-
Value added in mining.....do....	33.3	2.1	16.0	15.8	14.8
Capital expenditures (except land and mineral rights),					
total.....do....	1.5	0.3	2.6	2.4	1.3
Mineral development and exploration.....do....	0.3	0.1	1.7	1.5	0.5
New structures and additions.....do....	(Z)	0.1	0.1	0.1	0.1
New machinery and equipment.....do....	1.2	0.1	0.8	1.0	0.7
Used plant and equipment.....do....	(Z)	(Z)	(Z)	(Z)	-
Gross book value of fixed assets, total.....do....	59.5	25.2	12.4	12.0	9.7
Mineral properties.....do....	18.6	6.9	5.8	5.6	3.8
Building and other structures (excluding land).....do....	24.7	1.1	1.7	1.7	1.5
Machinery and equipment.....do....	16.3	17.3	4.9	4.8	4.2
Mineral development and exploration expenditures,					
total.....do....	1.0	0.1	2.5	2.3	1.1
Capitalized.....do....	0.2	0.1	1.7	1.5	0.4
Expensed.....do....	0.7	(Z)	0.9	0.8	0.7
Mineral rights and geological expenditures.....do....	0.7	(Z)	0.3	0.3	0.3
Lease and land acquisition of nonproducing acreage.....do....	0.3	0.3	0.3	0.3	0.3
Geological and geophysical.....do....	0.1	(Z)	(Z)	(Z)	(Z)
Lease rents.....do....	0.4	(Z)	(Z)	(Z)	(Z)
Net shipments of primary product.....1,000 short tons..	3.2	(NA)			
Crude minerals mined during 1967, by ownership.....do....	3.2	(NA)	0.7	0.7	0.6
Production for own account.....do....	3.1	(NA)	0.6	0.6	0.4
Production for accounts of others.....do....	(Z)	(NA)	0.1	0.1	0.1
Royalty production.....do....	(Z)	(NA)	(Z)	(Z)	(Z)
Royalties paid.....million dollars..	0.8	(NA)	0.4	0.4	0.4
Undistributed.....1,000 short tons..	-	(NA)	-	-	-
Man-hours worked by production, development, and					
exploration workers, total.....millions..	4.6	0.4	1.9	1.9	1.6
At mines, total.....do....	4.1	0.4	1.8	1.8	1.5
Underground.....do....	2.9	-	1.4	1.4	1.2
Open-pit.....do....	0.2	0.3	(Z)	(Z)	-
Surface (including mine shops and yards).....do....	1.0	0.1	0.3	0.3	0.3
At preparation plants.....do....	0.6	(Z)	0.1	0.1	0.1
Man-hours spent on exploration and development					
(included above).....do....	0.1	(Z)	0.1	0.1	0.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing data for individual companies. (Z) Less than one-half of the unit of measure specified.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	1021.--Copper Ores-			1031.--Lead and zinc ores					
	Producing establishments		Non-producing establishments	All operations, total	Producing establishments				Non-producing establishments
	(Mines with treatment plants)				Total	Mines only	Mines with treatment plants	Treatment plants only	
	Open-pit	Underground							
Establishments, total.....number..	20	7	30	167	148	94	37	7	19
With 1 to 19 employees.....do....	3		24	110	95	87	3	2	15
With 20 to 99 employees.....do....	3	2	5	29	25	3	10	5	4
With 100 employees or more.....do....	14	5	1	28	28	4	24	-	4
All employees (average for the year).....1,000..	6.5	4.4	0.4	9.1	8.9	1.4	6.9	0.3	0.2
Payroll (all employees), total for year..million dollars..	55.2	31.1	3.1	60.9	59.1	8.9	44.8	1.6	1.8
Production, development, and exploration workers:									
Average for the year.....1,000..	5.0	3.2	0.4	7.5	7.3	1.3	5.9	0.2	0.1
March.....do....	7.3	4.7	0.3	7.8	7.6	1.4	6.0	0.2	0.1
May.....do....	7.4	4.7	0.3	7.8	7.7	1.4	6.1	0.2	0.1
August.....do....	3.1	2.6	0.4	7.3	7.1	1.3	5.8	0.2	0.2
November.....do....	2.4	0.8	0.5	7.0	6.8	1.0	5.6	0.2	0.1
Man-hours.....millions..	11.8	6.6	0.7	15.0	14.6	2.6	11.5	0.4	0.4
January-March.....do....	4.3	2.3	0.1	3.9	3.8	0.8	2.9	0.1	0.1
April-June.....do....	4.5	2.6	0.2	4.0	3.9	0.7	3.0	0.1	0.1
July-September.....do....	1.7	1.1	0.2	3.6	3.6	0.4	2.9	0.1	0.1
October-December.....do....	1.4	0.6	0.2	3.5	3.4	0.7	2.8	0.1	0.1
Wages.....million dollars..	39.8	24.1	2.4	46.2	45.1	7.6	36.3	1.2	1.2
Supplemental labor cost not included in payroll.....do....	10.1	4.4	0.3	6.5	6.3	1.1	5.0	0.2	0.2
Legally required expenditures, including Social Security contributions.....do....	3.6	2.2	0.2	3.5	3.5	0.7	2.6	0.1	0.1
Payments for voluntary programs.....do....	6.5	2.2	0.1	3.1	2.8	0.4	2.4	0.1	0.1
Cost of supplies, etc., total.....do....	96.7	32.8	31.3	92.4	58.9	5.0	37.2	16.7	33.5
Supplies used, minerals received for preparation, and purchased machinery.....do....	78.4	23.3	17.0	63.3	48.9	3.8	29.0	16.1	14.5
Cost of resales.....do....	0.1	(Z)	-	(Z)	(Z)	-	(Z)	-	-
Purchased fuels consumed.....do....	3.2	1.5	0.4	1.5	1.1	0.1	0.9	0.1	0.4
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	1,047.4	327.2	6.4	764.1	748.1	62.6	642.8	42.7	16.0
Cost.....million dollars..	10.3	2.8	0.1	6.7	6.5	0.9	5.1	0.5	0.2
Generated less sold.....million kw.-hrs..	138.9	242.8	13.6	16.1	12.0	-	12.0	-	4.2
Contract work.....million dollars..	4.7	5.2	13.8	20.8	2.4	0.2	2.3	-	18.4
Value of shipments and receipts (including resales), total.....do....	277.9	82.7	-	151.2	151.2	21.7	113.8	15.7	-
Value of resales.....do....	0.1	(Z)	-	(Z)	(Z)	-	(Z)	-	-
Value added in mining.....do....	220.2	72.8	(²)	102.6	104.8	17.6	87.7	(²)	(²)
Capital expenditures (except land and mineral rights), total.....do....	39.0	22.9	15.9	43.8	12.5	1.0	11.1	0.4	32.2
Mineral development and exploration.....do....	6.8	7.2	5.8	11.3	4.3	0.2	3.9	-	7.0
New structures and additions.....do....	9.0	3.0	4.2	15.1	1.1	(Z)	1.0	0.1	13.9
New machinery and equipment.....do....	22.8	12.3	4.0	17.1	6.9	0.6	6.1	0.3	10.2
Used plant and equipment.....do....	0.5	0.4	2.0	0.3	0.2	0.1	0.1	(Z)	0.1
Gross book value of fixed assets, total.....do....	455.0	161.9	26.7	322.5	271.2	44.1	208.0	19.2	51.3
Mineral properties.....do....	100.5	9.2	12.4	105.9	92.8	22.5	70.3	-	11.8
Building and other structures (excluding land).....do....	125.2	15.8	11.7	104.0	81.5	6.1	69.8	5.6	22.8
Machinery and equipment.....do....	229.3	136.9	8.9	112.5	96.9	15.4	67.9	13.6	16.8
Mineral development and exploration expenditures, total.....do....	8.1	9.0	9.3	17.6	9.2	1.3	7.7	-	8.4
Capitalized.....do....	6.8	7.2	5.2	11.2	4.3	0.1	3.9	-	7.0
Expensed.....do....	1.3	1.8	4.1	6.4	4.9	1.1	3.8	-	1.5
Mineral rights and geological expenditures.....do....	1.4	0.2	2.1	2.3	1.8	0.2	1.6	-	0.6
Lease and land acquisition of nonproducing acreage.....do....	0.4	-	0.3	0.6	0.6	-	0.6	-	(Z)
Geological and geophysical.....do....	0.9	-	1.5	1.5	1.1	0.2	0.9	-	0.4
Lease rents.....do....	0.1	0.2	0.4	0.5	0.1	(Z)	0.1	-	0.1
Net shipments of primary product.....1,000 short tons..									
Crude minerals mined during 1967, by ownership.....do....	65.8	14.8	1.3	16.9	16.9	1.7	15.2	-	0.1
Production for own account.....do....	54.6	14.8	1.3	14.7	14.6	1.0	13.5	-	0.1
Production for accounts of others.....do....	(Z)	-	-	0.2	0.2	0.1	0.1	-	-
Royalty production.....do....	11.3	(Z)	-	2.1	2.1	0.5	1.6	-	-
Royalties paid.....million dollars..	2.0	(Z)	-	1.2	1.2	0.4	0.8	-	-
Undistributed.....1,000 short tons..	(NA)	(NA)	-	0.2	0.2	0.2	-	-	-
Man-hours worked by production, development, and exploration workers, total.....millions..	11.8	6.5	0.7	15.0	14.6	2.6	11.5	0.4	0.4
At mines, total.....do....	8.7	5.5	0.7	13.1	12.8	2.6	10.0	-	0.3
Underground.....do....		4.1	0.1	10.6	10.3	2.3	7.9	-	0.3
Open-pit.....do....	5.1		0.2	-	-	-	-	-	-
Surface (including mine shops and yards).....do....	3.6	1.4	0.4	2.6	2.5	0.3	2.1	-	(Z)
At preparation plants.....do....	3.2	1.0	0.1	1.9	1.9	-	1.5	0.4	(Z)
Man-hours spent on exploration and development (included above).....do....	(Z)	1.1	0.3	1.6	1.3	0.5	0.8	-	0.2

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing data for individual companies. (Z) Less than one-half of the unit of measure specified.

¹Includes data for one combination open-pit-underground operation.²Not shown since the cost of supplies, etc., and purchased machinery installed exceeded the sum of the value of shipments and capital expenditures.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
		Number	Payroll	Number	Man-hours	Wages				
		(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1021 Copper ores:										
Establishments, total.....	156	20.9	170.9	15.0	32.5	114.6	436.5	361.6	675.9	122.1
Establishments with an average of-										
0 to 4 employees.....	66	.1	.6	.1	.1	.4	.8	2.8	1.2	2.5
5 to 9 employees.....	19	.2	1.8	.2	.3	.7	.1	4.5	1.2	2.8
10 to 19 employees.....	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
20 to 49 employees.....	15	.9	7.6	.5	1.2	3.6	10.9	39.2	29.0	21.1
50 to 99 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
100 to 249 employees.....	14	2.1	16.2	1.1	2.2	7.4	(1)	73.3	57.5	11.9
250 to 499 employees.....	15	5.4	47.0	3.6	7.9	26.9	159.8	79.4	210.1	29.1
500 to 999 employees.....	9	6.0	50.4	4.7	10.7	37.2	163.5	105.1	241.2	27.4
1,000 to 2,499 employees.....	4	6.2	47.1	4.9	10.2	38.4	105.7	57.3	135.8	27.3
Estabs. covered by admin. records ¹	33	(Z)	.2	(Z)	(Z)	.2	.5	.3	.8	.1
1031 Lead and zinc ores:										
Establishments, total.....	167	9.1	60.9	7.5	15.0	46.2	102.6	92.3	151.2	43.8
Establishments with an average of-										
0 to 4 employees.....	72	0.1	0.5	0.1	0.1	0.3	0.7	0.4	0.8	0.2
5 to 9 employees.....	21	0.2	0.9	0.1	0.2	0.6	1.7	0.6	2.0	0.4
10 to 19 employees.....	17	0.8	5.9	0.6	1.4	4.2	10.2	26.9	13.7	23.4
20 to 49 employees.....	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
50 to 99 employees.....	12	0.8	6.3	0.5	0.9	2.6	(1)	29.1	16.2	10.5
100 to 249 employees.....	18	5.0	31.9	4.3	8.6	26.2	68.7	26.7	86.9	8.6
250 to 499 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 to 999 employees.....	2	2.3	15.4	1.9	3.7	12.3	23.7	8.8	31.6	0.9
1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
Estabs. covered by admin. records ¹	34	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	(Z)
Lead ores subindustries:										
Establishments, total.....	104	4.2	30.6	3.3	6.7	21.9	36.9	62.9	65.5	34.2
Establishments with an average of-										
0 to 4 employees.....	60	.1	.3	.1	.1	.3	.5	.2	.6	.1
5 to 9 employees.....	14	.1	.5	.1	.1	.3	.8	.3	.9	.3
10 to 19 employees.....	8	.7	6.4	.4	.9	2.4	-4.0	7.3	10.7	30.1
20 to 49 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
50 to 99 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
100 to 249 employees.....	6	1.1	7.9	.9	1.9	6.6	15.7	8.8	21.7	2.9
250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 to 999 employees.....	2	2.3	15.4	1.9	3.7	12.3	23.7	8.8	31.6	.9
1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Estabs. covered by admin. records ¹	28	(Z)	.1	(Z)	(Z)	.1	.2	.1	.2	(Z)
Zinc ores subindustries:										
Establishments, total.....	63	4.9	30.3	4.1	8.3	24.3	65.7	29.4	85.6	9.5
Establishments with an average of-										
0 to 4 employees.....	12	(Z)	.2	(Z)	(Z)	.1	.2	.2	.3	.1
5 to 9 employees.....	7	.1	.3	.1	.1	.3	.9	.3	1.1	.1
10 to 19 employees.....	9	.1	1.0	.1	.3	.8	2.5	6.3	4.0	2.8
20 to 49 employees.....	11	.4	2.4	.3	.6	1.8	5.2	(D)	7.2	(D)
50 to 99 employees.....	6	0.4	2.4	0.3	0.5	1.7	4.0	4.9	8.0	1.0
100 to 249 employees.....	12	1.8	10.9	1.6	3.0	8.5	25.9	9.7	32.5	3.1
250 to 499 employees.....	6	2.1	13.1	1.8	3.7	11.1	27.1	8.2	32.7	2.6
Estabs. covered by admin. records ¹	6	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)

See footnotes at end of table.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967-Continued

(See appendix, Explanation of Terms)

Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
		Number	Payroll	Number	Man-hours	Wages				
		(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1042 Lode gold:										
Establishments, total.....	77	2.4	16.2	2.0	4.6	12.9	33.3	10.5	42.3	1.5
Establishments with an average of-										
0 to 4 employees.....	60	.1	.3	.1	.1	.2	.2	.3	.3	.3
5 to 9 employees.....	7	(Z)	.2	(Z)	.1	.2	.1	(D)	.1	(D)
10 to 19 employees.....	4	.2	1.6	.2	.3	.8	1.2	.4	1.6	.1
50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
100 to 249 employees.....	3	2.1	14.0	1.8	4.2	11.6	31.8	9.7	40.4	1.1
1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Estabs. covered by admin. records ¹	40	(Z)	.2	(Z)	.1	.1	.1	.1	.2	(Z)
1043 Placer gold:										
Establishments, total.....	48	.2	1.1	.2	.4	.9	2.1	.7	2.5	.3
Establishments with an average of-										
0 to 4 employees.....	40	.1	.2	(Z)	.1	.2	.6	.3	.8	.1
5 to 9 employees.....	3	.1	.8	.1	.3	.7	1.5	.4	1.8	.2
10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
20 to 49 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Estabs. covered by admin. records ¹	24	(Z)	.1	(Z)	(Z)	.1	.3	.1	.2	(Z)
1044 Silver ores:										
Establishments, total.....	58	1.2	8.2	1.0	1.9	6.4	16.0	5.1	18.5	2.6
Establishments with an average of-										
0 to 4 employees.....	39	(Z)	.3	(Z)	.1	.2	.3	.2	.4	.1
5 to 9 employees.....	8	(Z)	.2	(Z)	.1	.1	.2	.2	.2	.1
10 to 19 employees.....	4	.2	2.0	.2	.4	1.0	1.9	.8	1.5	1.2
20 to 49 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
100 to 249 employees.....	2	.8	5.7	.7	1.4	5.0	13.4	3.9	16.3	1.0
500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Estabs. covered by admin. records ¹	24	(Z)	.1	(Z)	(Z)	.1	.1	(Z)	.2	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies. Data for this item are included in the under-scored figures above. (Z) Represents less than one-half the unit of measure specified.

¹Report forms were not mailed to companies that operated only one establishment, and which Social Security payroll indicated had fewer than 5 employees. Actual payroll (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5A. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1021	Copper ores.....1967..	675.9	648.5	(D)	(D)	(D)	540.3	534.1	6.2
	.....1963..	670.2	648.1	(D)	(D)	-	532.2	522.1	10.1
1031	Lead and zinc ores.....1967..	151.2	149.8	(D)	(D)	-	134.5	127.4	7.1
	.....1963..	136.0	125.7	9.9	0.2	0.2	110.7	109.7	1.0
	Lead ores subindustry.....1967..	65.5	53.1	(D)	(D)	-	54.5	41.0	13.5
	.....1963..	50.7	42.2	8.4	(D)	(D)	46.0	(D)	(D)
	Zinc ores subindustry.....1967..	85.6	70.2	(D)	(D)	-	80.0	67.0	13.0
	.....1963..	85.2	67.2	17.7	(D)	(D)	64.7	(D)	(D)
1042	Lode gold.....1967..	42.3	41.4	(D)	-	(D)	41.5	41.4	0.1
	.....1963..	26.6	26.3	0.3	-	-	26.9	26.3	0.6
1043	Placer gold.....1967..	2.5	(D)	(D)	-	-	2.5	2.5	(Z)
	.....1963..	7.5	6.8	(D)	(D)	-	6.8	6.8	-
1044	Silver ores.....1967..	18.5	17.9	(D)	-	(D)	20.9	17.9	3.0
	.....1963..	26.1	23.7	2.4	-	-	26.0	23.7	2.3

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 5B. Ores Mined and Gross Metal Content of Shipments: 1967

Product	All industries total	Copper, lead, zinc, gold, and silver ores industries and subindustries							All industries total
		Total	Copper ores	Lead ores	Zinc ores	Lode gold ores	Placer gold	Silver gold	
Copper, lead, zinc, gold, and silver ore mined.....Million short tons..	(NA)	148.3	127.5	7.3	9.7	3.2	(X)	0.6	(NA)
Gross copper content, total.....1,000 pounds..	1,910,603	1,908,869	1,879,418	13,563	8,769	2,141	4,978	-	1,734
Crude ores shipped to smelters and leaching plants...do..	19,182	19,182	19,165	10	7	-	-	-	-
Concentrates, total.....do..	1,891,421	1,889,687	1,860,253	13,553	8,762	2,141	4,978	-	1,734
Copper concentrates.....do..	1,572,277	1,570,543	1,558,551	6,630	5,362	-	-	-	1,734
Lead, zinc, gold, and silver concentrates.....do..	17,687	17,687	245	6,923	3,400	2,141	4,978	-	-
Copper precipitates.....do..	301,457	301,457	301,457	-	-	-	-	-	-
Gross lead content, total.....do..	619,292	616,668	70	481,839	90,026	11,073	-	33,660	2,624
Crude ore shipped to smelters.....do..	26,862	26,862	-	26,264	-	-	-	598	-
Concentrates, total.....do..	592,430	595,054	70	455,575	90,026	11,073	-	33,062	2,624
Lead concentrates.....do..	535,485	533,468	-	449,701	83,767	-	-	-	2,017
Copper, zinc, gold, and silver concentrates.....do..	56,945	56,338	70	5,874	6,259	11,073	-	33,062	607
Gross zinc content, total.....do..	1,151,148	1,121,419	49,462	154,191	902,730	9,742	-	5,294	29,729
Crude ores shipped to smelters.....do..	24,059	24,059	-	13,634	10,400	-	-	25	-
Concentrates, total.....do..	1,127,089	1,097,360	49,462	140,557	892,330	9,742	-	5,269	29,729
Zinc concentrates.....do..	1,081,376	1,052,414	34,405	122,507	886,151	7,523	-	1,828	28,962
Copper, lead, gold, and silver concentrates.....do..	45,713	44,946	15,057	18,050	6,179	2,219	-	3,441	767
Gross gold content, total.....1,000 fine ounces..	1,572	1,570	323	24	17	1,143	61	(NA)	(NA)
From lode deposits.....do..	1,510	1,509	323	24	17	1,143	-	(NA)	(NA)
Crude ores shipped to smelters.....do..	6	6	(NA)	(NA)	(Z)	-	-	(Z)	-
Concentrates, total.....do..	495	494	319	23	15	137	-	(NA)	(NA)
Gold concentrates.....do..	147	147	12	-	-	135	-	-	-
Copper, lead, zinc, and silver concentrates.....do..	348	347	307	23	15	(NA)	-	(NA)	(NA)
Mill bullion and precipitates.....do..	1,009	1,009	-	-	(NA)	1,007	-	-	-
From placer gravels.....do..	61	61	-	-	-	-	61	-	-
Gross silver content, total.....do..	(D)	(D)	8,377	6,616	2,706	2,077	(D)	12,939	(NA)
From lode deposits, total.....do..	32,724	32,716	8,377	6,616	2,706	2,077	-	12,939	(NA)
Crude ore shipped to smelters.....do..	1,085	1,085	107	873	41	-	-	63	-
Concentrates, total.....do..	30,337	30,328	8,271	5,743	2,664	775	-	12,876	(NA)
Silver concentrates.....do..	14,916	14,916	425	1,394	-	240	-	12,857	-
Copper, lead, zinc, and gold concentrates.....do..	15,421	15,412	7,845	4,349	2,664	535	-	19	(NA)
Mill bullion and precipitates.....do..	1,303	1,303	-	-	(NA)	1,302	-	-	-
From placer gravels.....do..	(D)	(D)	-	-	-	-	(D)	-	-

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (NA) Not available. (X) Not applicable. (D) Withheld to avoid disclosing data for individual companies. (Z) Represents less than one-half of the unit of measure specified.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	Production	Shipments including interplant transfers		Gross quantity of metals contained ¹					
			Quantity	Value	Copper	Lead	Zinc	Gold	Silver	
		(Million short tons)	(Million short tons)	(Million dollars)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 fine ounces)	(1,000 fine ounces)	
				INDUSTRY 1021.--COPPER ORES						
	UNITED STATES									
1021- --	Copper ores, total.....1967..	(X)	(X)	654.7	(X)	(X)	(X)	(X)	(X)	
	.....1963..	(X)	(X)	658.2	(X)	(X)	(X)	(X)	(X)
10211 --	Crude copper ores, total.....1967..	127.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	145.3	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10211 0-	Crude ore mined, total.....1967..	127.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	145.3	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10211 03	From underground operations.....1967..	17.0	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	22.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10211 05	From open-pit operations.....1967..	110.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	122.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10211 2-	Ore and residue for shipment, total.....1967..	45.6	45.6	118.4	734,303	(D)	-	(D)	(D)	
	.....1963..	60.9	60.9	139.2	1,089,231	-	(²)	377	6,348
10211 21	To Smelters.....1967..	0.6	0.6	4.3	19,165	-	-	(D)	(D)	
	.....1963..	3.7	3.7	13.3	90,553	-	(²)	18	392
10211 23	To Mills.....1967..	45.0	45.0	114.1	715,138	(D)	-	(D)	(D)	
	.....1963..	57.2	57.2	125.9	998,678	-	-	360	5,956
10212 01	Copper concentrates.....1967..	3.0	2.9	459.8	1,572,277	2,759	(D)	311	8,032	
	.....1963..	4.3	4.3	468.3	2,079,647	692	² 1,469	405	9,313
10213 01	Copper precipitates.....1967..	0.2	0.2	76.2	301,457	(X)	(X)	(X)	(X)	
	.....1963..	0.2	0.2	50.6	251,018	(X)	(X)	(X)	(X)
	ARIZONA									
1021- --	Copper ores, total.....1967..	(X)	(X)	(D)	(X)	(X)	(X)	(X)	(X)	
	.....1963..	(X)	(X)	338.8	(X)	(X)	(X)	(X)	(X)
10211 --	Crude copper ores, total.....1967..	73.8	(D)	(D)	(X)	(X)	(X)	(X)	(X)	
	.....1963..	80.8	11.1	35.2	(X)	(X)	(X)	(X)	(X)
10211 0-	Crude ore mined.....1967..	73.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	80.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10211 2-	Ore and residues shipped to smelter and mills.....1967..	(D)	(D)	(D)	122,963	(D)	-	(D)	(D)	
	.....1963..	11.1	11.1	35.2	259,266	-	(D)	(D)	(D)
10212 01	Copper concentrates.....1967..	1.9	1.8	267.1	872,736	(D)	(D)	(D)	4,045	
	.....1963..	³ 2.5	³ 2.5	³ 303.6	³ 1,231,533	-	(D)	(D)	4,116
10213 01	Copper precipitates.....1967..	0.1	0.1	33.3	103,664	(X)	(X)	(X)	(X)	
	.....1963..	(³)	(³)	(³)	(³)	(X)	(X)	(X)	(X)
					INDUSTRY 1031.--LEAD AND ZINC ORES					
	UNITED STATES									
1031- --	Lead and zinc ores, total.....1967..	(X)	(X)	149.8	(X)	(X)	(X)	(X)	(X)	
	.....1963..	(X)	(X)	126.8	(X)	(X)	(X)	(X)	(X)
10311 --	Crude lead and zinc ores, total.....1967..	17.1	2.1	21.8	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	14.2	4.5	21.4	(NA)	(NA)	(NA)	(NA)	(NA)
10311 0-	Crude ore mined, total.....1967..	17.1	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	14.2	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 03	From underground operations.....1967..	17.1	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	13.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 05	From open-pit operations.....1967..	-	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	
	.....1963..	0.3	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 2-	Ore and residue for shipment, total.....1967..	2.1	2.1	21.8	3,202	^r 118,414	^r 205,299	15	2,631	
	.....1963..	4.5	4.5	21.4	9,071	^r 109,277	^r 400,359	24	4,039
10311 21	To Smelters.....1967..	0.3	0.3	6.5	17	26,264	84,844	(NA)	915	
	.....1963..	0.4	0.4	5.4	255	20,543	91,688	(NA)	506
10311 23	To Mills.....1967..	1.8	1.8	15.3	3,185	^r 92,150	^r 120,355	14	1,716	
	.....1963..	4.1	4.1	16.0	8,816	^r 88,734	^r 308,671	22	3,533

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	Production (Million short tons)	Shipments including interplant transfers		Gross quantity of metals contained ¹					
			Quantity	Value	Copper	Lead	Zinc	Gold	Silver	
			(Million short tons)	(Million dollars)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 fine ounces)	(1,000 fine ounces)	
INDUSTRY 1031. --LEAD AND ZINC ORES--Continued										
UNITED STATES--Continued										
10312 --	Lead and zinc concentrates, total.....	1967..	1.3	1.3	128.0	6,014	545,741	1,044,367	35	6,878
		1963..	1.1	1.1	105.7	9,114	444,117	1,045,617	42	7,727
10312 02	Lead concentrates.....	1967..	0.4	0.4	50.8	3,185	535,485	23,801	28	5,735
		1963..	⁴ 0.3	⁴ 0.3	⁴ 43.3	4,747	429,984	29,790	32	5,696
10312 03	Zinc concentrates.....	1967..	0.9	0.9	77.2	2,829	10,256	1,020,566	8	1,142
		1963..	⁴ 0.8	⁴ 0.9	⁴ 62.1	4,367	14,133	1,015,827	9	2,031
SOUTH										
1031- --	Lead and zinc ores, total.....	1967..	(X)	(X)	27.6	(X)	(X)	(X)	(X)	(X)
		1963..	(X)	(X)	23.0	(X)	(X)	(X)	(X)	(X)
10311 --	Crude lead and zinc ores, total.....	1967..	4.8	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	4.0	1.7	3.5	(NA)	(NA)	(NA)	(NA)	(NA)
10311 0-	Crude ore mined, total.....	1967..	4.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	4.0	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 03	From underground operations.....	1967..	4.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
WEST										
1031- --	Lead and zinc ores, total.....	1967..	(X)	(X)	71.1	(X)	(X)	(X)	(X)	(X)
		1963..	(X)	(X)	64.6	(X)	(X)	(X)	(X)	(X)
10311 --	Crude lead and zinc ores, total.....	1967..	3.7	0.5	14.0	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	4.6	1.7	10.7	(NA)	(NA)	(NA)	(NA)	(NA)
10311 0-	Crude ore mined, total.....	1967..	3.7	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	4.6	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
1031103	From underground operations.....	1967..	3.7	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 2-	Ores and residues for shipment to smelters and mills...	1967..	0.5	0.5	15.1	3,195	99,561	76,790	15	2,631
		1963..	1.7	1.7	10.7	8,816	76,866	142,681	22	3,532
10312 0-	Lead and zinc concentrates.....	1967..	0.5	0.5	56.0	7,606	226,242	390,522	35	6,844
		1963..	0.6	0.6	53.9	9,114	251,710	468,985	42	7,557
IDAHO										
1031- --	Lead and zinc ores, total.....	1967..	(X)	(X)	21.1	(X)	(X)	(X)	(X)	(X)
		1963..	(X)	(X)	18.0	(X)	(X)	(X)	(X)	(X)
10311 --	Crude lead and zinc ores, total.....	1967..	0.8	(Z)	0.1	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	1.0	(Z)	0.2	(NA)	(NA)	(NA)	(NA)	(NA)
10311 0-	Crude ore mined, total.....	1967..	0.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	1.0	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
1031103	From underground operations.....	1967..	0.8	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
103112	Ores and residues for shipment to smelters and mills...	1967..	(Z)	(Z)	0.1	-	910	130	-	10
		1963..	(Z)	(Z)	0.2	-	1,810	268	-	23
103120-	Lead and zinc concentrates.....	1967..	0.2	0.2	21.0	(Z)	93,439	110,097	(Z)	2,892
		1963..	0.2	0.2	17.8	-	110,152	119,371	(Z)	2,920
COLORADO										
1031- --	Lead and zinc ores, total.....	1967..	(X)	(X)	14.9	(X)	(X)	(X)	(X)	(X)
		1963..	(X)	(X)	(NA)	(X)	(X)	(X)	(X)	(X)
10311 --	Crude lead and zinc ores, total.....	1967..	1.1	-	-	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 0-	Crude ore mined, total.....	1967..	1.1	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10311 03	From underground operations.....	1967..	1.1	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
		1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963-Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	Production (Million short tons)	Shipments including interplant transfers		Gross quantity of metals contained ¹				
			Quantity	Value	Copper	Lead	Zinc	Gold	Silver
			(Million short tons)	(Million dollars)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 fine ounces)	(1,000 fine ounces)
			INDUSTRY 1031.--LEAD AND ZINC ORES--Continued						
	UNITED STATES--Continued								
10311 2-	Ores and residues for shipment to smelters and mills...1967..	(Z)	(Z)	0.1	-	810	160	-	40
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
10312 0-	Lead and zinc concentrates.....1967..	0.1	0.1	14.8	2,366	41,312	111,428	11	1,400
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
			INDUSTRY 1042.--LODE GOLD						
	UNITED STATES								
1042- --	Lode gold, total.....1967..	(X)	(X)	41.5	(X)	(X)	(X)	(X)	(X)
	1963..	(X)	(X)	² 27.0	(X)	(X)	(X)	(X)	(X)
10421 0-	Crude lode gold ore mined.....1967..	3.2	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1963..	2.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10422 01	Gold concentrates, mill bullion, and precipitates.....1967..	(X)	(X)	41.0	1,958	10,943	2,219	1,156	511
10423 03		(X)	(X)	26.7	(⁶)	(⁶)	(⁶)	749	390
10423 05	Undistributed.....1967..	(X)	(X)	0.5	(NA)	(NA)	(NA)	(NA)	(NA)
			INDUSTRY 1043.--PLACER GOLD						
	UNITED STATES								
1043- --	Placer gold, total.....1967..	(X)	(X)	2.5	(X)	(X)	(X)	(X)	(X)
	1963..	(X)	(X)	6.8	(X)	(X)	(X)	(X)	(X)
10433 07	Production and shipments.....1967..	⁷ 63.8	⁷ 63.1	2.2	(X)	(X)	(X)	64	(X)
	1963..	⁷ 193.7	⁷ 193.7	6.8	(X)	(X)	(X)	194	(X)
	Undistributed.....1967..	(X)	(X)	0.3	(X)	(X)	(X)	(NA)	(X)
			INDUSTRY 1044.--SILVER ORES						
	UNITED STATES								
1044- --	Silver ores, total.....1967..	(X)	(X)	20.9	(X)	(X)	(X)	(X)	(X)
	1963..	(X)	(X)	25.9	(X)	(X)	(X)	(X)	(X)
10441 0-	Crude silver ores mined.....1967..	0.7	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1963..	0.9	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10441 2-	Crude ores and residues for shipment to smelters and mills.....1967..	0.2	0.2	0.3	-	998	133	(Z)	65
	1963..	0.1	0.1	1.3	1,366	474	140	4	1,118
10442 01	Silver concentrates.....1967..	⁸ 41.3	⁸ 34.7	20.0	7,355	43,930	5,660	(NA)	14,916
	1963..	64.0	64.0	24.6	⁶ 9,063	⁶ 56,529	⁶ 4,372	19	15,093
10443 07	Placer silver.....1967..	(D)	(D)	(Z)	(X)	(X)	(X)	(X)	(D)
	1963..	⁷ 17.0	⁷ 17.0	(Z)	(X)	(X)	(X)	(X)	17
	Undistributed.....1967..	(X)	(X)	0.6	(NA)	(NA)	(NA)	(NA)	(NA)
	IDAHO								
1044- --	Silver ores, total.....1967..	(X)	(X)	19.6	(X)	(X)	(X)	(X)	(X)
	1963..	(X)	(X)	20.9	(X)	(X)	(X)	(X)	(X)
10441 0-	Crude silver ores mined.....1967..	0.6	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1963..	0.5	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
10441 2-	Crude ores and residues for shipment to smelters and mills.....1967..	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
	1963..	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
10442 01	Silver concentrates.....1967..	⁸ 42.5	⁸ 36.3	⁹ 19.4	5,345	33,124	3,312	(NA)	14,224
	1963..	⁸ 49.0	⁸ 49.0	⁹ 20.9	6,636	(D)	(D)	(D)	13,709
	Undistributed.....1967..	(X)	(X)	0.2	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. ¹Revised. (Z) Less than one-half the unit of measure specified.¹Represents metal content of production where both production and shipments are shown.²Figures for zinc content of copper ore for shipment to smelters is included with figures for zinc content of copper concentrates.³Copper precipitates are included with copper concentrates.⁴Represents net concentrates. Excludes concentrates transferred from one establishment to another within the Lead and Zinc Ores Industry for further preparation.⁵Includes 0.3 million dollars worth of gold ores shipped to smelters.⁶Figures for gold concentrates are included with figures for silver concentrates.⁷Represents thousands of fine ounces.⁸Represents thousands of short tons.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1021.--COPPER ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuel used, total.....		(X)	314.4	(X)	291.8
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	306.8	(X)	283.9
100091	Minerals received for preparation:					
	Crude ores and residues.....	Million short tons.....	124.4	(¹)	57.2	129.8
100091	Crude ore mined and prepared at same establishment.....	..do.....		(X)	86.5	(X)
353011	Purchased machinery installed.....		(X)	81.5	(X)	45.6
289211	Supplies used:					
289212	Explosives.....	Million pounds..	112.7	6.6	61.7	5.3
289214	Blasting accessories.....		(X)	1.3	(X)	(³)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	18.1	170.0	19.9
970099	All other supplies.....		(X)	¹ 198.3	(X)	³ 83.4
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	1.0	(X)	(Z)
	Fuels used, total.....		(X)	7.6	(X)	8.0
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	5,830.9	2.1	10,823.0	(NA)
291111	Gasoline.....	1,000 gal.....	3 021.8	0.7	2,502.0	(NA)
291141	Fuel oil.....	1,000 bbls.....	1,530.8	3.1	582.0	(NA)
291151						
977000	Undistributed fuel used ²		(X)	0.1	(X)	(Z)
	MOUNTAIN DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuel used, total.....		(X)	292.4	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	286.6	(X)	(NA)
100091	Minerals received for preparation:					
	Crude ores and residues.....	Million short tons.....	115.9	(¹)	(NA)	(NA)
	Crude ore mined and prepared at same establishment.....	..do.....		(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	77.6	(X)	(NA)
970099	Supplies used:					
	All other supplies.....		(X)	¹ 208.1	(X)	(NA)
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed.....		(X)	0.7	(X)	-
	Fuel used, total.....		(X)	5.8	(X)	(NA)
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	5,830.9	2.1	(NA)	(NA)
977000	Undistributed fuel used ²		(X)	0.1	(X)	(NA)
	ARIZONA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	106.2	(X)	97.0
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	102.4	(X)	93.0
100091	Minerals received for preparation:					
	Crude ores and residues.....	Million short tons.....	71.8	(¹)	80.2	(¹)
100091	Crude ore mined and prepared at same establishment.....	..do.....		(X)		(X)
353011	Purchased machinery installed.....		(X)	30.0	(X)	8.7
	Supplies used:					
289211	Explosives.....	Million pounds..	72.9	3.4	40.7	3.1
289212						
289214	Blasting accessories.....		(X)	0.4	(X)	(³)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	6.7	46.0	8.2
970099	All other supplies.....		(X)	¹ 42.8	(X)	¹ 73.0
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.5	(X)	(Z)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>Geographic Area--Continued</u>		INDUSTRY 1021.--COPPER ORES--Continued			
	ARIZONA--Continued					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used--Continued					
	Fuel used, total.....		(X)	3.8	(X)	4.0
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	4,130.2	1.4	4,958.0	(NA)
291111	Gasoline.....	1,000 gal.....	1,659.0	0.4	1,591.0	(NA)
291141	Fuel oil.....	1,000 bbl.....	442.0	1.9	361.0	(NA)
291151	Undistributed fuel used ²		(X)	0.1	(X)	(Z)
977000						
	<u>Type of Operation</u>					
	Producing establishments:					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuel used, total.....		(X)	297.1	(X)	⁴ 291.5
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	289.8	(X)	⁴ 283.5
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.8	(X)	(Z)
	Fuels used, total.....		(X)	7.1	(X)	8.0
977000	Undistributed fuel used ²		(X)	0.1	(X)	(NA)
			INDUSTRY 1031.--LEAD AND ZINC ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuel used, total.....		(X)	64.8	(X)	54.0
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	63.3	(X)	51.6
100091	Ores and residues prepared in the lead and zinc industry: Received from other establishments for preparation.....	Million short tons.....	16.9	(¹)	4.6	26.1
100091	Mined and prepared at same establishment.....	..do.....		(X)	9.8	(X)
353011	Purchased machinery installed.....		(X)	16.7	(X)	4.3
	Supplies used:					
289211	Explosives.....		15.3	2.1	9.7	1.7
289212	Steel mill shapes and forms.....	1,000 short tons	22.8	5.4	11.4	3.0
331201	All other supplies.....		(X)	¹ 38.7	(X)	16.4
970099						
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	0.5	(X)	1.4
	Fuel used, total.....		(X)	1.5	(X)	0.9
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	1.0	0.2	587.0	(NA)
291111	Gasoline.....	1,000 gal.....	535.0	0.1	508.0	(NA)
291141	Fuel oil.....	1,000 bbl.....	159.9	0.8	92.0	(NA)
291151	Undistributed fuel used ²		(X)	0.1	(X)	0.1
976000						
	SOUTH					
	Selected supplies, minerals received for preparation purchased machinery installed and fuel used, total.....		(X)	8.6	(X)	9.5
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	8.4	(X)	9.4
100091	Ores and residues prepared in the lead and zinc industry: Received from other establishments for preparation.....	Million short tons.....	4.8	(¹)	4.4	(¹)
100091	Mined and prepared at same establishment.....	..do.....		(X)		(X)
353011	Purchased machinery installed.....		(X)	2.2	(X)	1.2

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1031.--LEAD AND ZINC ORES--Continued			
	<u>Geographic Area--Continued</u>					
	SOUTH--Continued					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total--Continued					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total--Continued					
	Supplies used:					
970099	All other supplies.....		(X)	¹ 6.0	(X)	¹ 8.2
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.2	(X)	(NA)
	Fuels used, total.....		(X)	0.2	(X)	0.1
977000	Undistributed fuel used ²		(X)	(Z)	(X)	(NA)
	WEST					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	29.3	(X)	⁴ 28.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	28.2	(X)	⁴ 28.4
100091	Ores and residues prepared in the lead and zinc industry: Received from other establishments for preparation.....	Million short tons.....	3.8	(¹)	1.8	14.0
100091	Mined and prepared at same establishment.....	...do.....		(X)	2.8	(X)
353011	Purchased machinery installed.....		(X)	2.2	(X)	2.1
	Supplies used:					
970099	All other supplies.....		(X)	¹ 25.7	(X)	⁴ 12.3
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.3	(X)	(NA)
	Fuel used, total.....		(X)	0.9	(X)	0.5
977000	Undistributed fuel used ²		(X)	0.1	(X)	(NA)
	<u>Type of Operation</u>					
	Mines with preparation plants:					
	Selected supplies, minerals received for preparation purchased machinery installed, and fuel used, total.....		(X)	29.9	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	29.0	(X)	(NA)
100091	Ores and residues prepared in the lead and zinc industry: Received from other establishments.....	Million short tons.....	15.1	(¹)	(NA)	(NA)
100091	Mined and prepared at same establishment.....	...do.....		(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	¹ 6.4	(X)	(NA)
	Supplies used:					
970099	All other supplies.....		(X)	22.5	(X)	(NA)
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	0.1	(X)	(NA)
	Fuel used, total.....		(X)	0.9	(X)	(NA)
977000	Undistributed fuel used ²		(X)	(Z)	(X)	(NA)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1042.--LODE GOLD			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	8.9	(X)	6.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	8.5	(X)	5.5
100091	Ores prepared in the lode gold industry: Mined and prepared at same establishment.....	Million short tons.....	3.2	(X)	2.1	(X)
353011	Purchased machinery installed.....		(X)	1.3	(X)	0.5
970099	Supplies used: All other supplies.....		(X)	7.0	(X)	5.0
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	0.2	(X)	0.3
	Fuels used, total.....		(X)	0.4	(X)	0.5
977000	Undistributed fuel used ²		(X)	(Z)	(X)	0.1
			INDUSTRY 1043.--PLACER GOLD			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuel used, total.....		(X)	0.5	(X)	1.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	0.4	(X)	0.8
104310	Gravel washed in the placer gold industry.....	Million cu. yds.	7.6	(X)	23.8	(X)
353011	Purchased machinery installed.....		(X)	0.1	(X)	0.4
970099	All other supplies.....		(X)	0.1	(X)	0.4
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.2	(X)	(NA)
	Fuels used, total.....		(X)	0.1	(X)	0.6
977000	Undistributed fuel used ²		(X)	(Z)	(X)	(Z)
			INDUSTRY 1044.--SILVER ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	4.2	(X)	⁴ 6.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	4.1	(X)	⁴ 6.1
100091	Ores and residues prepared in the silver industry: Crude ores and residues received for preparation.....	Million short tons.....	-	-	0.8	(¹)
100091	Crude ores produced and prepared at same establishment.....	do.....	0.6	(X)		(X)
353011	Purchased machinery installed.....		(X)	0.8	(X)	1.2
331201	Supplies used: Steel mill shapes and forms.....	1,000 short tons	(NA)	0.6	(X)	¹ 45.0
970099	All other supplies.....		(X)	2.5		
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	0.2	(X)	(NA)
	Fuel used, total.....		(X)	0.1	(X)	0.2
977000	Undistributed fuel used ²		(X)	(Z)	(X)	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing data for individual companies. (Z) Represents less than one-half the unit of measure specified.

¹The cost of minerals received for preparation is combined with all other supplies.²This item represents the total cost of supplies or fuels for establishments that did not report detailed cost data. For 1967 this also includes estimates for establishments that were not mailed report forms.³Blasting accessories was not collected separately in 1963.⁴Includes the cost of products bought and resold without further processing.

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



MIC67(1)-10C

INDUSTRY SERIES

BAUXITE AND FERROALLOY ORES, EXCEPT VANADIUM

SIC code	Industry
1051	Bauxite and other aluminum ores
1062	Manganese ores
1064	Tungsten ores
1069	Ferroalloy ores, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	4
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	5
3 Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967 . .	6
4 General Statistics, by Employment Size of Establishment: 1967	7
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	7
6 Primary Products of the Industry: 1967 and 1963	8
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	9
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

BAUXITE AND FERROALLOY ORES, EXCEPT VANADIUM

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Groups 105, Bauxite and Other Aluminum Ores, and 106, Ferroalloy Ores, Except Vanadium. The separate industries included in these groups are as follows:

SIC Code and Title

- 1051--Bauxite and Other Aluminum Ores
- 1062--Manganese Ores
- 1064--Tungsten Ores
- 1069--Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1051--Bauxite and Other Aluminum Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing bauxite and other aluminum ores. Associated activities such as drying, calcining, activating, and sintering are also included.

Industry 1062--Manganese Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing manganese ores, such as pyrolusite, rhodochrosite, psilomelane, and manganite. This industry also includes treatment plants primarily engaged in processing imported ores. The mining of manganiferous ores valued chiefly for their iron content is classified in industry 1011, Iron Ores.

Industry 1064--Tungsten Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing tungsten ores, such as ferberite, huebnerite, scheelite, and wolframite.

Industry 1069--Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing ores for use in the production of ferroalloys not elsewhere classified, such as chromite, columbite, and nickel ore. The principal products of this industry in 1967 were molybdenum and nickel ores. Titanium ore, used sometimes for ferroalloying but principally for other purposes, is classified in industry 1093.

Separate statistics could not be published for 1967 for industries 1064 and 1069. Hence, combined 1967 totals are shown for these two industries throughout this report.

The total value of shipments and receipts of the Bauxite Industry in 1967 was \$28.8 million, of which over 90 percent represented primary products. The total value of shipments and receipts of the Ferroalloy Ores, Except Vanadium, Industry Group was \$108.3 million, of which primary products of these industries amounted to about \$107.9 million.

These figures represent gross value of shipments and receipts and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment. In order to eliminate this duplication, net shipment figures were derived by subtracting from gross shipments

either the value of shipments of ores to treatment plants or, if the latter figure was not available, the cost of minerals received from other establishments for treatment. Thus, for the Bauxite Industry, the cost of minerals received from other establishments for treatment was \$1.6 million. Separate figures for gross and net shipments are shown in tables 1 and 3 of this report.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

BUREAU OF CENSUS AND BUREAU OF MINES COMPARISONS

The Bureau of the Census statistics on primary products of the Bauxite and Ferroalloy Ores, Except Vanadium, Industries are, in general, comparable with statistics for similar products published by the Bureau of Mines. Differences in the statistics result primarily from differences in data collection methods, coverage, and objectives sought. The most closely comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

The Bureau of the Census excludes single unit establishments with no paid employees. The Bureau of Mines includes all establishments regardless of size. However, the contribution to products of such establishments is usually small.

The Bureau of the Census obtains information on total production and shipments of crude ore and treated minerals from each establishment, including shipments of ores to treatment plants, usually in the same mining industry. The Bureau of the Census also calculates net shipments in order to provide a measure of the product leaving the particular mining industry. In general, the Bureau of Mines presents statistics on products as marketable shipments to consumers.

The Bureau of the Census classifies ores on the basis of the metal of major total value contained in the ores or concentrates produced and shipped, frequently obtaining only the total tonnage of ores mined. The Bureau of Mines sometimes obtains more detailed product statistics. For instance, the Bureau of the Census excludes from its statistics on manganese ores and concentrates (and includes as iron ores) those classified as manganiferous iron ores valued chiefly for their iron content. The latter ores and concentrates are included in the Bureau of Mines product statistics on manganiferous ores (5 to 35 percent Mn).

The Bureau of the Census includes in its product statistics minerals concentrated, otherwise treated, or sized from imported ores as well as those from domestic ores. The Bureau of Mines statistics represent production and shipments of domestic ores only. This accounts, in part, for the differences shown for manganese ores.

The Bureau of the Census statistics on value represent reported values f.o.b. mine or plant. In some instances the Bureau of Mines estimates value for a portion of the product on the basis of unit market values obtained from other sources. This explains some of the differences for bauxite.

Differences exist in establishment coverage in certain areas for the two collecting agencies.

QUANTITY AND VALUE OF MINERAL PRODUCTS AS REPORTED TO THE BUREAU OF
THE CENSUS AND TO THE BUREAU OF MINES: 1967

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Pro- duction (1,000 long tons)	Shipments including interplant transfers		Pro- duction (1,000 long tons)	Shipments	
		Quantity (1,000 long tons)	Value (\$1,000)		Quantity (1,000 long tons)	Value (\$1,000)
Bauxite:						
Crude bauxite.....	2,134.6	2,140.0	23,100.0	2,051.0	(NA)	(NA)
Net shipments.....	(X)	¹ 1,950.2	¹ 21,500.0	(X)	2,107.0	22,579.0
Manganese ores.....	(NA)	(NA)	(NA)	(NA)	² 65.0	(NA)

Standard Notes: (NA) Not available. (X) Not applicable. ¹Represents gross shipments less receipts from other establishments for treatment. ²Represents manganese ore (35 percent or more manganese) and ferruginous manganese ore, except in Minnesota. These shipments represent marketable ores for the consumer. Besides direct-shipping ore, they include without duplication concentrates and nodules made from domestic ores.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Selected expenses				Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Quantity of net shipments of primary products ² (1,000 tons)	Capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)		Supplies, fuels, and purchased electric energy (million dollars)	Minerals received for treatment (million dollars)	Contract work (million dollars)	Purchased machinery installed (million dollars)				
INDUSTRY 1051.--BAUXITE AND OTHER ALUMINUM ORES																	
1967 ³ ..	(NA)	17	7	0.6	4.1	0.5	0.8	2.9	22.5	(D)	(D)	0.6	0.4	28.8	(D)	(D)	0.4
1963...	10	17	4	0.6	3.4	0.4	0.8	2.3	17.5	1.1	1.5	1.2	0.5	21.5	20.5	1,478.0	0.3
1958...	12	29	9	0.7	3.6	0.5	0.9	2.3	15.4	1.2	1.1	0.4	1.5	18.2	17.4	1,420.0	1.4
1954...	12	25	6	0.9	3.6	0.7	1.3	2.5	12.8	1.2	1.2	1.6	0.4	16.8	16.0	1,766.0	0.3
1939 ⁴ ..	10	16	(NA)	0.8	0.8	0.7	1.2	0.6	2.0	0.5	(NA)	(Z)	(NA)	(NA)	2.5	388.0	(NA)
1935...	(NA)	⁵ 11	(NA)	⁶ 0.6	⁶ 0.5	0.6	(NA)	0.3	1.2	0.4	(NA)	(NA)	(NA)	(NA)	1.5	(NA)	(NA)
1929...	(NA)	9	(NA)	0.7	0.8	0.6	(NA)	0.5	1.8	0.4	(NA)	0.1	0.1	(NA)	2.2	365.0	(NA)
1919...	(NA)	10	(NA)	0.8	1.1	0.7	(NA)	0.9	1.7	0.4	-	-	(NA)	2.2	2.2	(NA)	(NA)
1909...	10	10	(NA)	0.6	0.2	0.6	(NA)	0.2	0.6	0.1	-	-	(NA)	0.7	0.7	(NA)	(NA)
1902...	7	⁵ 38	(NA)	0.2	0.1	⁷ 0.2	(NA)	0.1	0.1	(Z)	(NA)	(Z)	(NA)	(NA)	0.1	29.0	(NA)
GROUP 106.--FERROALLOY ORES																	
1967 ³ ..	(NA)	43	11	4.0	31.9	3.1	6.2	23.0	73.5	(D)	(D)	4.5	(D)	108.3	(D)	(D)	12.6
1963...	48	58	11	3.1	20.4	2.6	4.9	15.2	66.4	18.0	7.0	3.7	1.5	90.7	83.7	(X)	5.8
1958...	286	294	33	5.4	26.7	4.4	8.3	19.5	74.3	19.8	15.4	6.5	2.2	111.5	106.4	(X)	6.5
1954...	972	1,086	51	8.1	38.5	6.8	15.1	31.3	107.4	27.8	16.7	8.8	8.5	153.7	136.9	(X)	15.5
1939...	(NA)	⁵ 103	(NA)	2.5	4.0	2.2	4.7	3.1	16.4	3.3	(NA)	0.1	(NA)	(NA)	19.8	(X)	(NA)
INDUSTRY 1062.--MANGANESE ORES																	
1967 ³ ..	(NA)	20	4	0.2	0.8	0.1	0.2	0.6	1.8	0.4	(D)	0.1	(D)	4.0	(D)	(D)	0.2
1963...	16	17	5	0.2	1.1	0.2	0.4	0.8	2.3	0.6	4.4	0.1	0.2	7.2	2.8	55.0	0.4
1958...	182	186	22	2.1	9.0	1.8	3.5	7.2	20.0	7.0	10.7	2.8	1.1	39.4	34.3	⁸ 460.0	2.2
1954...	319	367	24	2.6	9.3	2.3	4.3	7.6	18.1	6.3	5.4	3.6	2.3	32.4	27.0	455.0	3.3
1939 ⁹ ..	26	⁵ 34	(NA)	0.5	0.6	0.5	1.0	0.5	0.7	0.2	(NA)	-	(NA)	(NA)	0.9	48.0	(NA)
1929 ⁹ ..	(NA)	19	(NA)	0.4	0.5	0.4	(NA)	0.4	1.0	0.2	(NA)	(Z)	(Z)	(NA)	1.2	41.0	(NA)
1919 ⁹ ..	(NA)	35	(NA)	1.0	1.2	0.9	(NA)	1.1	1.5	0.5	-	0.1	(NA)	2.2	2.2	(NA)	(NA)
1909...	10	10	(NA)	0.1	(Z)	0.1	(NA)	(Z)	(Z)	(Z)	-	-	(NA)	(Z)	(Z)	(NA)	(NA)
1902 ⁹ ..	19	⁵ 19	(NA)	0.2	0.1	⁷ 0.2	(NA)	0.1	0.2	(Z)	(NA)	-	(NA)	(NA)	0.2	16.0	(NA)
1889...	(NA)	(NA)	(NA)	0.4	0.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	0.2	24.0	(NA)
1880...	(NA)	² 6	(NA)	0.2	(Z)	¹⁰ 0.2	(NA)	(NA)	0.1	(Z)	(NA)	(NA)	(NA)	(NA)	0.1	11.0	(NA)
INDUSTRIES 1064 AND 1069.--TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.																	
1967 ³ ..	(NA)	23	7	3.8	31.1	3.0	6.0	22.4	71.7	(D)	(D)	4.4	(D)	104.3	(D)	(D)	12.4
1963...	33	41	6	2.9	19.2	2.4	4.5	14.4	64.1	17.5	2.6	3.6	1.3	83.4	80.9	(X)	5.4
1958...	(NA)	108	11	3.3	17.7	2.6	4.9	12.2	54.2	12.8	4.7	3.7	1.1	72.1	72.1	(X)	4.4
1954...	(NA)	719	27	5.5	29.3	4.6	10.8	23.7	89.3	21.5	11.4	5.2	6.2	121.3	109.9	(X)	12.3
1939...	(NA)	⁵ 69	(NA)	1.9	3.4	1.7	3.7	2.6	15.7	3.0	(NA)	0.1	(NA)	(NA)	18.8	(X)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than \$50 thousand.

¹For the Bauxite Industry in 1963 represents net shipments of primary products only. For the Bauxite Industry in 1958 and 1954, and for the Manganese Ores Industry and the Tungsten Ores Industry in 1963 and 1958, represents gross shipments and receipts less shipments to treatment plants; for all other industries and subindustries in 1958 and 1954 represents gross shipments and receipts less cost of minerals received from other establishments for treatment. In general, also excludes the value of minerals purchased for resale without further processing. For 1939 and earlier years represents value of net production and receipts.

²For bauxite in 1963, 1958, and 1954, and for manganese ores and tungsten ores in 1958, represents gross shipments less shipments to treatment plants; for all other products in 1958 and 1954 represents gross shipments less tonnage of minerals received from other establishments for treatment. For manganese ores in 1963, represents production of crude manganese ores. For bauxite and manganese ores, represents long tons; for tungsten ores and chromium ores, represents short tons. For bauxite, represents dried bauxite equivalent.

³In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, in the Bauxite and other aluminum ores industry there were no establishments without paid employees. In the manganese ores industry there were 2 establishments without paid employees; however, they accounted for less than 3 percent of the industry's value added. In the Tungsten ores and Ferroalloy ores, n.e.c. industries there were 10 establishments without paid employees; however, they accounted for less than 1 percent of the industries' value added.

⁴Excludes statistics for two nonproducing mines. Figures for these bauxite operations were combined in 1939 with the figures for two nonproducing manganese ores mines and one chromite mine. For the five nonproducing operations combined, employment averages 21 for that year and principle expenses amounted to \$66 thousand.

⁵Represents number of mines.

⁶Excludes figures for employees at central offices maintained independently of mine offices.

⁷Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

⁸Includes shipments by establishments classified in other industries.

⁹Excludes nonproducing operations for which separate figures are not available, as follows: 1929, 3 establishments; 1919, 2 establishments; and 1902, 3 mines. It is not clear whether data for nonproducing operations in years prior to 1902 were included in the statistics shown for those years.

¹⁰Represents the average number employed during the time the mines were active.

TABLE 2 General Statistics by Geographic Area and Type of of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	INDUSTRY 1051--BAUXITE												
United States.....	17	7	0.6	4.1	0.5	0.8	2.9	22.5	6.7	28.8	0.4	0.6	17.5
<u>Type Of Operation</u>													
Mines only.....	10	3	0.5	3.2	0.4	0.6	2.3	20.9	4.0	24.8	0.1	¹ 0.5	¹ 16.2
	INDUSTRY 1062--MANGANESE ORES												
United States.....	20	4	0.2	0.8	0.1	0.2	0.6	1.8	2.5	4.0	0.2	0.2	2.3
	INDUSTRIES 1064 and 1069--TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.												
United States.....	23	7	3.8	31.1	3.0	6.0	22.4	71.7	45.0	104.3	12.4	2.9	64.1

Note: Detailed figures may not add to totals because of independent rounding.

¹Includes data for one nonproducing mine.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967

Item	1051.-Bauxite		1062.-Manganese ores	1064 and 1069-Tungsten ores and ferroalloy ores n.e.c.
	United States, all operations	Mines only	United States, all operations	United States, all operations
Establishments, total.....number..	17	10	20	23
With 1 to 19 employees.....do....	10	7	16	16
With 20 to 99 employees.....do....	5	1	4	3
With 100 employees or more.....do....	2	2	-	4
All employees (average for the year).....1,000..	0.6	0.5	0.2	3.8
Payroll (all employees), total for year..million dollars..	4.1	3.2	0.8	31.1
Production, development, and exploration workers:				
Average for the year.....1,000..	0.5	0.4	0.1	3.0
March.....do....	0.5	0.4	0.1	3.1
May.....do....	0.5	0.4	0.1	3.1
August.....do....	0.5	0.4	0.1	3.1
November.....do....	0.5	0.4	0.1	2.8
Man-hours.....millions..	0.8	0.6	0.2	6.0
January-March.....do....	0.2	0.2	0.1	1.5
April-June.....do....	0.2	0.2	0.1	1.5
July-September.....do....	0.2	0.2	0.1	1.5
October-December.....do....	0.2	0.2	0.1	1.5
Wages.....million dollars..	2.9	2.3	0.6	22.4
Supplemental labor cost not included in payroll.....do....	0.7	0.5	0.1	4.8
Legally required expenditures, including Social Security contributions.....do....	0.2	0.2	0.1	3.7
Payments for voluntary program.....do....	0.4	0.4	(Z)	1.1
Cost of supplies, etc., total.....do....	6.7	4.0	2.5	45.0
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	3.5	1.2	2.2	36.5
Cost of resales.....do....	1.9	1.9	-	-
Purchased fuels consumed.....do....	0.5	0.1	(Z)	1.1
Electric energy:				
Purchased:				
Quantity.....million kw.-hrs..	17.5	13.1	9.3	372.6
Cost.....million dollars..	0.3	0.2	0.1	3.0
Generated less sold.....million kw.-hrs..	-	-	-	55.4
Contract work.....million dollars..	0.6	0.6	0.1	4.4
Value of shipments and receipts (including resales), total.....do....	28.8	24.8	4.0	104.3
Value of resales.....do....	1.9	1.9	-	-
Value added in mining.....do....	22.5	20.9	1.8	71.7
Capital expenditures (except land and mineral rights), total.....do....	0.4	0.1	0.2	12.4
Mineral development and exploration.....do....	(Z)	(Z)	(Z)	1.0
New structures and additions.....do....	0.1	(Z)	(Z)	2.0
New machinery and equipment.....do....	0.3	0.1	0.2	9.2
Used plant and equipment.....do....	(Z)	-	(Z)	0.2
Gross book value of fixed assets, total.....do....	20.5	14.7	5.4	134.9
Mineral properties.....do....	5.3	3.6	0.1	14.1
Building and other structures (excluding land).....do....	4.0	3.3	1.6	9.8
Machinery and equipment.....do....	11.2	7.9	3.7	111.0
Mineral development and exploration expenditures, total.....do....	(Z)	(Z)	0.2	3.1
Capitalized.....do....	(Z)	(Z)	0.1	1.1
Expensed.....do....	(Z)	(Z)	(Z)	2.0
Mineral rights and geological expenditures.....do....	0.2	0.2	-	0.1
Lease and land acquisition of nonproducing acreage.....do....	(Z)	(Z)	-	0.1
Geological and geophysical.....do....	0.1	0.1	-	(Z)
Lease rents.....do....	0.1	0.1	-	(Z)
Net shipments of primary products.....million long tons..	(D)	(D)	(D)	(D)
Crude minerals mined during 1967, by ownership.....do....	2.1	2.1	0.1	21.6
Production for own account.....do....	1.9	1.9	(Z)	20.1
Production for accounts of others.....do....	-	-	-	-
Royalty production.....do....	0.2	0.1	0.1	1.5
Royalties paid.....million dollars..	0.2	0.1	(Z)	0.3
Undistributed.....million long tons..	(Z)	(Z)	(Z)	-
Man-hours worked by production, development, and exploration workers, total.....millions..	0.8	0.6	0.2	6.0
At mines, total.....do....	0.7	0.6	0.1	4.7
Underground.....do....	0.2	0.2	0.1	2.7
Open-pit.....do....	0.3	0.2	0.1	0.4
Surface (including mine shops and yards).....do....	0.2	0.2	(Z)	1.6
At preparation plants.....do....	0.1	-	0.1	1.3
Man-hours spent on exploration and development (included above).....do....	(Z)	(Z)	-	0.6

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1051	Bauxite and other aluminum ores: Establishments, total.....	17	0.6	4.1	0.5	0.8	2.9	22.5	6.7	28.8	0.4
	Establishments with an average of-										
	0 to 4 employees.....	4	0.6	4.1	0.5	0.8	2.9	22.5	6.7	28.8	0.4
	5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1062	Manganese ores: Establishments, total.....	20	0.2	0.8	0.1	0.2	0.6	1.8	2.5	4.0	0.2
	Establishments with an average of-										
	0 to 4 employees.....	13	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.3	(Z)
	5 to 9 employees.....	2	0.1	0.7	0.1	0.2	0.6	1.6	2.3	3.7	0.2
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	7	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(Z)
1064 1069	Tungsten ores and ferroalloy ores, n.e.c.: Establishments, total.....	23	3.8	31.1	3.0	6.0	22.4	71.7	45.0	104.3	12.4
	Establishments with an average of-										
	0 to 4 employees.....	8	(Z)	0.1	(Z)	(Z)	0.1	0.1	1.5	0.2	1.6
	5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	0.3	2.5	0.2	0.4	1.3	7.5	1.7	8.9	0.3
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	3	3.5	28.3	2.8	5.6	20.9	63.9	41.7	95.2	10.4
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. (Z) Represents less than one-half of the unit of measure specified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payroll indicated had fewer than 5 employees. Actual payroll (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1051	Bauxite and other aluminum ores.....1967..	28.8	(D)	(D)	-	(D)	24.7	(D)	(D)
	.....1963..	21.5	(D)	(D)	-	-	20.5	20.5	-
1062	Manganese ores.....1967..	4.0	(D)	(D)	-	-	(D)	(D)	-
	.....1963..	7.2	(D)	-	-	(D)	12.8	12.8	-
1064 1069	Tungsten ores and ferroalloy ores, n.e.c.....1967..	104.3	(D)	(D)	-	-	(D)	(D)	(D)
	.....1963..	83.5	(D)	(D)	-	-	100.7	(D)	(D)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

¹Includes the value of purchases for resale.

TABLE 6. Primary Products of the Industry: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Code	Product	1967				1963					
		Production (1,000 long tons)	Shipments, including interplant transfers			Production (1,000 long tons)	Shipments, including interplant transfers				
			Quantity (1,000 long tons)	Dried bauxite equivalent (1,000 long tons)	Value (Million dollars)		Quantity (1,000 long tons)	Dried bauxite equivalent (1,000 long tons)	Value (Million dollars)		
INDUSTRY 1051--BAUXITE AND OTHER ALUMINUM ORES											
1051---	Bauxite and other aluminum ores, total.....	(X)	(X)	(X)	26.6	(X)	(X)	(X)	¹ 20.5		
10511--	Crude (undried) bauxite.....	2,134.6	2,140.0	1,767.1	23.1	1,863.0	(X)	(D)	(D)		
1051120	Mined.....	2,134.6	(X)	(X)	(X)	1,863.0	(X)	(X)	(X)		
1051123	Shipped to preparation plants.....	(X)	2,140.0	1,767.1	23.1	{	(X)	139.0	79.0		
1051121	Shipped to consumers.....	(X)								(X)	(X)	(^{2})
10512--	Treated bauxite, total.....	137.5	140.1	182.6	3.5	(D)	1,789.0	1,478.0	20.5		
1051201	Dried.....	(D)	(D)	(D)	(D)	59.0				59.0	59.0
1051203	Calcined and activated.....	(D)	(D)	(D)	(D)	(D)				(D)	(D)
INDUSTRY--MANGANESE ORES											
INDUSTRIES 1064 AND 1069--TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.											
1062---	Manganese ores, total.....	143.3	138.7	3.9		125.0	(D)		(D)		
106212-	Crude manganese ores.....	143.3	138.7	3.9	{	55.0	(D)		(D)		
106220-	Manganese treated ores, nodules, and sinter (including washed material).....					70.0				89.0	6.8
1064 1069	Tungsten ores and ferroalloy ores, n.e.c.....	(X)	(X)	122.6		(X)	(X)		³ 100.7		

Note: Detailed figures may not add to totals because of independent rounding.

Standard Notes: (D) Withheld to avoid disclosing figures for individual companies. (X) Not applicable.

¹Represents gross shipments less receipts from other establishments for preparation or treatment.

²Not shown to avoid disclosing figures for kaolin shipped as a secondary product by four bauxite establishments.

³Represents net shipments.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuels Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1051.--BAUXITE AND OTHER ALUMINUM ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.9	(X)	2.9
	Selected supplies, minerals, received for preparation, and purchased machinery installed, total.....		(X)	3.5	(X)	2.6
	Ores and concentrates received for preparation:					
105191	Crude or dried bauxite.....	1,000 long tons.	189.8	1.6	(NA)	1.5
100097	Other ores and concentrates.....	1,000 short tons	(D)	(1)		
353011	Purchased machinery installed.....		(X)	0.4	(X)	0.5
	Supplies used:					
289211	Explosives.....	1,000 pounds....	(D)	1.5	(X)	0.1
289212	Steel mill shapes and forms.....	1,000 tons.....	(NA)			
331201	All other supplies.....		(X)			
970099						
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)		(X)	0.6
	Fuels used, total.....		(X)	0.5	(X)	0.3
131300	Gas, natural, manufactured, and mixed.....	Million cu. ft..	966.3	0.3	620.0	0.2
977000	Undistributed fuels used ²		(X)	(Z)	(X)	(Z)
			INDUSTRY 1062.--MANGANESE ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.3	(X)	5.1
			INDUSTRIES 1064 AND 1069.--TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used.....		(X)	37.6	(X)	19.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	36.5	(X)	18.8
100097	Ores and concentrates received for preparation.....	Million short tons.....	(D)	(D)	(NA)	2.6
353011	Purchased machinery installed.....		(X)	(D)		1.3
970099	All other supplies.....		(X)	(D)	(X)	15.0
974000	Undistributed supplies, minerals received for preparation, and purchased machinery installed ²		(X)	0.2		
	Fuels used, total.....		(X)	1.1	(X)	0.5
977000	Undistributed fuels used ²		(X)	-	(X)	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Represents less than one-half of the unit of measure specified.

¹Cost of other ores and concentrates received are included in cost of supplies used.²This item represents the total cost of supplies or fuels for establishments that did not report detailed costs. For 1967, this also includes estimates for establishments that were not mailed report forms.



EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



MIC67(1)-10D

INDUSTRY SERIES

METAL MINING SERVICES AND MISCELLANEOUS METAL ORES

SIC code	Industry
1081	Metal mining services
1092	Mercury ores
1093	Titanium ores
1094	Uranium-radium-vanadium ores
1099	Metallic ores, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	4
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	6
3 Detailed Statistics, by Selected Geographic Areas and Type of Operation: 1967 . . .	8
4 General Statistics, by Employment Size of Establishment: 1967	9
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	10
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	11
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	12
APPENDIX Explanation of Terms	A1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

METAL MINING SERVICES AND MISCELLANEOUS METAL ORES

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 108, Metal Mining Services, and Industry Group 109, Miscellaneous Metal Ores. The separate industries included in these groups are as follows:

SIC Code and Title

1081--Metal Mining Services
1092--Mercury Ores
1093--Titanium Ores
1094--Uranium--Radium--Vanadium Ores
1099--Metallic Minerals (Ores), Not Elsewhere Classified

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

METAL MINING SERVICES

Industry 1081--Metal Mining Services. This industry represents establishments primarily engaged in performing (for others on a contract, fee, or other basis) metal mining services, such as the removal of overburden, strip mining for metallic ores, prospect and test drilling, and mine exploration and development.

Establishments classified in the metal mining services industries were required to submit a separate report for each State in which mining services were performed. These reports were classified on the basis of the principal type of services performed and the principal industry served to determine their industry or subindustry classification. (Selected subindustry statistics are shown in tables 1, 2, and 3 of this report.) Each report submitted included data on the amount received for services, capital expenditures in 1967 and the number of employees in March by State and county. For geographic area statistics in table 2 other figures in each report were allocated on the basis of these reported data. For all other geographic area statistics for this industry in this report, the classification is based on the principal area in which each contractor performed services.

Companies which had complete responsibility for operating mines for others on a contract basis were requested to report as mine operators rather than as mineral service establishments. Data for such activities are excluded from the statistics in this report on the metal mining services industries but are included in the appropriate metal mining industry report. The receipts for performing such contract operations are not shown anywhere in the census of mineral industries.

The total receipts in the metal mining services industry in 1967 amounted to \$48.3 million.

MISCELLANEOUS METAL ORES

Industry 1092--Mercury Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing mercury ores and mercury metal. This industry includes the production of metallic mercury by furnacing or retorting at the mine site.

Industry 1093--Titanium Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing titanium ores such as ilmenite and rutile ores.

Industry 1094--Uranium-Radium-Vanadium Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing uranium-radium-vanadium ores.

Industry 1099--Metallic Minerals (Ores), Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing miscellaneous metallic minerals (ores), not elsewhere classified, such as antimony, beryllium, palladium, tin, and rare-earth ores.

The total value of shipments and receipts of the Miscellaneous Metal Ores Industries in 1967 was \$267 million. Of this total value for the group, the Mercury Ores Industry accounted for \$10.6 million; the Titanium Ores Industry, \$23.5 million; the Uranium-Radium-Vanadium Ores Industry, \$218.2 million; and the Metallic Ores, N.E.C., Industry, \$14.8 million.

The general statistics (employment, payrolls, value of shipments and receipts, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing production and shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows, insofar as possible, the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Miscellaneous Metal Ores Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are:

1. The Bureau of the Census excludes single unit establishments with no paid employees. The Bureau of Mines includes all reports obtained, regardless of size. However, the contribution to products of such small establishments which Census excludes is usually very small.
2. The Bureau of the Census values of shipments represent reported values f.o.b. mine or treatment plant. Some Bureau of Mines values are based on quantity of production or shipments and quoted market prices. For example, the figure shown in the table below for Bureau of Mines value of mercury metal produced was obtained by multiplying quantity production by the average 1967 price per flask in New York.
3. The Bureau of the Census figures for treated products include products treated from foreign materials. The Bureau of Mines figures for treated products represent only products treated from domestic materials.

4. Differences exist in coverage by the two bureaus. For titanium concentrate production, for example, the Bureau of the Census includes, and the Bureau of Mines excludes, data from establishments which engage only in treating or grinding titanium products.

5. For uranium-vanadium concentrates, the Bureau of the Census figures include low-grade concentrates shipped to treatment plants for upgrading. The Bureau of Mines figures for uranium-vanadium concentrates do not include such shipments.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Pro-duction (quan-tity)	Shipments including inter-plant transfers		Pro-duction (quan-tity)	Shipments	
			Quan-tity	Value (\$1,000)		Quan-tity	Value (\$1,000)
Mercury ores:							
Crude mercury ores...	1,000 short tons.....	373.8	(D)	(D)	¹ 440.0	(NA)	(NA)
Mercury metal.....	Flasks (76 pounds)...	23,000.0	22,700.0	10,900.0	23,784.0	(NA)	² 11,639.0
Titanium ores:							
Crude titanium ores..	1,000 short tons.....	27,981.0	(X)	(X)	(NA)	(NA)	(NA)
Titanium concentrates	...do.....	944.7	893.2	18,700.0	³ 935.0	³ 882.0	³ 18,519.0
Uranium-radium-vanadium ores:							
Crude uranium-vanadium ores.....	...do.....	5,500.0	1,700.0	29,200.0	(NA)	⁴ 5,276.0	⁴ 80,450.0
Uranium-vanadium concentrates.....	...do.....	⁵ 30.6	⁵ 30.7	⁵ 187,100.0	⁶ 14.0	(NA)	(NA)
Zirconium concentrates.	Short tons.	(NA)	(NA)	16.3	(NA)	(NA)	15.0
Antimony, beryllium, germanium, bast-naesite, monazite, and thorium concentrates and platinum group metals.....	.....	(X)	(X)		(X)	(X)	

(D) Withheld to avoid disclosing figures for individual companies. (X) Not applicable. (NA) Not available. ¹Represents mercury ores treated. ²Represents value of production, calculated at average New York price. ³Excludes rutile concentrates which were withheld to avoid disclosing individual company data. ⁴Represents uranium ore shipped to mills. The value figure represents the value of such ore at the mine. ⁵Includes slurry, and low-grade concentrates shipped to mills for further upgrading. ⁶Represents 8 thousand tons of U₃O₈ contained in uranium concentrates valued at \$117,000 thousand and 5 thousand tons of vanadium contained in vanadium ore and concentrates valued at \$21,331 thousand.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net shipments and receipts ¹	Quantity of primary products ²	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies fuels, and purchased electric energy	Minerals received for treatment	Contract work	Purchased machinery installed				
(number)	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
INDUSTRY 1081.--METAL MINING SERVICES																	
1967 ³ ..	(NA)	148	34	2.6	19.1	2.4	4.5	16.3	33.6	14.1	(X)	1.4	1.7	48.3	48.3	(X)	2.3
1963...	82	83	17	2.2	13.9	1.9	4.0	11.5	24.7	6.5	(X)	0.4	3.8	32.4	32.4	(X)	3.0
1958...	91	95	23	2.2	12.1	2.0	4.3	10.6	22.9	9.0	(X)	0.4	1.4	32.4	32.4	(X)	1.3
1954...	114	114	26	3.1	15.3	2.9	6.5	13.9	26.7	11.8	(X)	0.5	2.0	38.7	38.5	(X)	2.4
1939...	69	69	(NA)	0.7	1.0	0.6	1.3	0.9	1.8	0.5	(X)	(NA)	(NA)	(NA)	2.4	(X)	(Z)
1902...	(NA)	(NA)	(NA)	42.6	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	(NA)	(NA)	(NA)	1.4	(X)	(NA)
GROUP 109.--MISCELLANEOUS METAL ORES																	
1967 ³ ..	(NA)	295	53	7.3	54.0	5.7	11.7	39.6	174.8	(D)	(D)	(D)	(D)	267.1	(D)	(X)	45.5
1963...	346	417	63	8.7	60.9	6.4	13.8	41.5	209.8	56.7	82.3	14.1	11.0	355.1	265.5	(X)	19.0
1958 ⁵ ..	708	758	79	9.8	53.1	7.9	16.7	40.8	196.5	71.3	110.5	69.8	22.7	365.2	254.7	(X)	105.6
1954 ⁵ ..	701	781	39	4.9	20.7	4.0	8.5	16.3	(NA)	17.7	(NA)	8.0	7.6	(NA)	(NA)	(X)	20.4
1939 ⁵ ..	683	780	(NA)	1.3	1.7	1.2	2.6	1.4	2.8	0.9	(NA)	(Z)	(NA)	(NA)	3.8	(X)	(NA)
INDUSTRY 1092.--MERCURY ORES																	
1967 ³ ..	(NA)	62	9	0.7	4.7	0.6	1.2	3.8	8.3	(D)	(D)	(D)	(D)	10.6	10.6	(D)	(D)
1963...	49	49	3	0.3	1.8	0.3	0.6	1.6	2.6	1.0	-	0.2	0.1	3.7	3.7	19.2	0.3
1958 ⁵ ..	77	79	9	0.7	3.1	0.6	1.2	2.6	7.1	82.0	(8)	0.1	0.4	8.6	(D)	33.8	0.9
1954 ⁵ ..	81	87	5	0.5	2.0	0.4	0.8	1.6	3.4	81.4	(8)	(Z)	0.2	4.5	(D)	17.5	0.5
1939 ⁵ ..	72	769	(NA)	0.7	0.9	0.6	1.4	0.8	1.4	0.4	(NA)	(Z)	(NA)	(NA)	1.8	18.2	(NA)
1929 ⁹ ..	(NA)	40	(NA)	1.1	1.6	1.0	(NA)	1.4	2.0	0.8	(NA)	(Z)	0.6	(NA)	2.8	23.8	(NA)
1919 ⁹ ..	(NA)	26	(NA)	0.8	1.0	0.7	(NA)	0.8	1.2	0.6	-	(Z)	(NA)	1.8	1.8	(NA)	(NA)
1909...	30	30	(NA)	0.7	0.6	0.6	(NA)	0.5	0.7	0.2	-	(Z)	(NA)	0.9	0.9	(NA)	(NA)
1902...	46	751	(NA)	1.5	1.1	1.0	1.4	0.9	1.2	0.3	(NA)	(Z)	(NA)	1.6	1.6	34.5	(NA)
1889 ⁹ ..	(NA)	711	(NA)	1.0	0.6	1.0	0.9	0.6	1.0	0.2	(NA)	(NA)	(NA)	(NA)	1.2	26.6	(NA)
1870...	(NA)	4	(NA)	0.8	0.6	(NA)	(NA)	(NA)	0.8	(Z)	(NA)	(NA)	(NA)	(NA)	0.8	(NA)	(NA)
1860...	(NA)	3	(NA)	0.3	0.2	(NA)	(NA)	(NA)	0.2	0.2	(NA)	(NA)	(NA)	(NA)	0.4	(NA)	(NA)
INDUSTRY 1093.--TITANIUM ORES ¹²																	
1967 ³ ..	(NA)	7	6	0.9	6.4	0.7	1.4	4.9	17.3	5.4	-	0.7	1.4	23.5	23.5	(NA)	1.3
1963...	7	8	7	1.0	6.4	0.8	1.7	5.1	15.0	5.6	-	1.5	2.1	22.0	22.0	¹³ 901.0	2.2
1958...	9	11	7	1.0	4.5	0.7	1.2	2.9	12.7	84.9	(8)	0.1	1.8	17.2	16.5	603.0	2.5
1954...	7	10	6	0.8	3.7	0.6	1.3	2.4	11.1	84.0	(8)	0.3	1.3	12.8	(D)	¹³ 557.0	4.0
1939...	3	73	(NA)	0.2	0.2	0.2	0.3	0.1	0.4	0.1	(NA)	-	(NA)	(NA)	0.5	16.0	(NA)
INDUSTRY 1094.--URANIUM-RADIUM-VANADIUM ORES ¹⁴																	
1967 ³ ..	(NA)	188	34	5.4	40.5	4.1	8.5	28.9	142.1	38.5	35.6	26.8	15.7	218.2	182.6	5,500.0	40.5
1963...	266	335	51	6.7	45.2	5.1	11.3	34.2	190.6	49.1	81.6	12.3	8.6	326.4	¹⁶ 244.7	6,383.0	15.9
1958 ¹⁵ ..	563	602	61	7.9	44.4	6.4	13.9	34.4	174.8	64.1	109.5	69.6	20.1	336.5	227.0	5,480.0	101.6
1954...	572	637	26	3.5	14.6	2.9	6.2	11.9	(17)	12.6	(17)	7.5	5.3	(17)	(17)	(17)	14.8
1939...	8	73	(NA)	0.4	0.6	0.4	0.9	0.5	1.0	0.4	(NA)	(Z)	(NA)	(NA)	1.5	105.0	(NA)
INDUSTRY 1099.--METALLIC ORES, N.E.C. ¹⁸																	
1967 ³ ..	(NA)	38	4	0.3	2.4	0.3	0.6	2.0	7.1	(D)	(D)	(D)	(D)	14.8	(D)	(X)	(D)
1963...	25	25	2	0.2	1.0	0.1	0.2	0.7	1.6	1.2	0.6	(Z)	0.2	3.0	¹⁶ 2.4	(X)	0.6
1958 ⁵ ..	66	66	2	0.2	1.1	0.2	0.3	0.9	1.8	81.4	(8)	0.1	0.4	3.0	(D)	(X)	0.7
1954 ⁵ ..	44	47	2	0.1	0.4	0.1	0.2	0.3	0.8	80.7	(8)	0.1	0.7	1.3	(D)	(X)	1.1
1902...	22	723	(NA)	0.1	(Z)	¹⁰ 0.1	(NA)	(Z)	0.1	-	(NA)	-	(NA)	(NA)	0.1	(X)	(NA)
1889 ¹⁹ ..	(NA)	(NA)	(NA)	0.4	0.2	(NA)	(NA)	(NA)	(20)	0.1	(NA)	(Z)	(NA)	(NA)	(Z)	(X)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand.

¹Figures for 1939 and earlier years represent value of net production and receipts.²Represents production. For the Mercury Ores Industry, represents 1,000 flasks (76 pounds each) of mercury metal. For the Titanium Ores Industry, represents thousands of short tons of titanium (ilmenite and rutile) concentrates; for the Uranium-Radium-Vanadium Ores Industry, represents thousands of short tons of crude uranium-vanadium ores.³In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, there were 113 establishments without paid employees in these industries; however, they accounted for less than 1 percent of the industries' value added.⁴Represents number of employees engaged in contract work and payments for contract work as reported by companies operating metal mines.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

Footnotes for Table 1--10D--Continued

⁵Excludes data for Alaska. In 1958 and 1954, 2 establishments in Alaska were reported in the Mercury Ores Industry; and in 1958, 2, and in 1954, 5 establishments in the Metallic Ores, N.E.C., Industry.

⁶Represents the sum of the figures shown for the separate industries and may include some duplication due to the same company operating in more than one industry.

⁷Represents number of mines.

⁸The figure for the cost of minerals received for treatment is included with the figure for the cost of supplies, purchases for resale, fuels, and purchased electric energy. For 1954, the combined cost of minerals received for preparation for the Mercury Ores, Titanium Ores, and Metallic Ores, N.E.C., Industries was \$1,082 thousand.

⁹Excludes nonproducing operations as follows: 1929, 13 establishments; 1919, 2 establishments; and 1889, 6 mines.

¹⁰Figures for the average number of production, developments, and exploration workers were converted to a 300-day basis for establishments which operated for a shorter period.

¹¹Represents the average number during the times the mines were active.

¹²In addition to the years shown, titanium ores establishments were reported as follows: 1929, 1; 1919, 2; 1909, 1; and 1902, 1.

¹³Includes production by industries other than Titanium Ores.

¹⁴In addition to the years shown, uranium-radium-vanadium ores establishments were reported as follows: 1929, 2; 1919, 13; and 1909, 2.

¹⁵Excludes data for Alaska. In 1958, 1 establishment in Alaska was reported in the Uranium-Radium-Vanadium Ores Industry.

¹⁶Includes purchases for resale without further processing.

¹⁷Not available. Figures for quantity of ores and concentrates, value of shipments, and cost of minerals received for treatment were not collected in the 1954 census. The uranium chapter of the 1959 Minerals Yearbook (United States Department of the Interior, Bureau of Mines) shows uranium ore production in 1954 as 914 thousand short tons. On the basis of these and other figures in this 1959 Minerals Yearbook, it is estimated that the value of shipments and receipts of the Uranium-Radium-Vanadium Ores Industry in 1954 was between \$70 and \$90 million, that the value of net shipments and receipts was between \$30 and \$50 million, that value added in mining was between \$20 and \$40 million, and that cost of minerals received for treatment between \$30 and \$50 million.

¹⁸In addition to the years shown, metallic ores, n.e.c. establishments were reported as follows: 1939, 1; 1929, 1; and 1909, 3.

¹⁹Represents antimony operations and selected figures for 678 nonproducing tin openings.

²⁰Not shown since the cost of supplies and contract work exceeds the value of shipments and receipts.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	INDUSTRY 1081.--METAL MINING SERVICES												
United States.....	148	34	2.6	19.1	2.4	4.5	16.3	33.6	17.2	48.3	2.3	2.2	24.7
North Central Region.....	26	6	0.5	4.2	0.5	0.9	3.6	10.1	3.5	13.3	0.3	0.3	3.2
East North Central Division.....	5	3	0.1	0.9	0.1	0.3	0.9	2.0	0.8	2.6	0.1	0.1	1.0
West North Central Division.....	21	3	0.4	3.2	0.4	0.7	2.7	8.1	2.7	10.7	0.2	0.2	2.3
South Region.....	17	3	0.2	0.9	0.2	0.3	0.9	1.9	0.8	2.4	0.1	0.2	1.6
West Region.....	96	24	1.9	13.7	1.7	3.2	11.2	21.0	12.6	31.8	1.9	1.6	19.4
Mountain Division.....	78	22	1.7	12.5	1.5	2.9	10.0	18.7	11.6	28.6	1.7	1.5	18.2
New Mexico.....	7	5	0.3	2.8	0.3	0.6	2.6	4.4	1.6	5.8	0.2	0.1	0.5
Arizona.....	14	4	0.4	2.4	0.3	0.7	2.1	3.7	3.0	6.3	0.3	0.5	7.6
Pacific Division.....	18	2	0.2	1.3	0.2	0.3	1.2	2.3	1.0	3.2	0.1	0.1	1.1
	INDUSTRY 1092.--MERCURY ORES												
United States, total.....	62	9	0.7	4.7	0.6	1.2	3.8	8.3	(D)	10.6	(D)	0.3	2.6
	INDUSTRY 1093.--TITANIUM ORES												
United States, total.....	7	6	0.9	6.4	0.7	1.4	4.9	17.3	7.5	23.5	1.3	1.0	15.0
	INDUSTRY 1094.--URANIUM-RADIUM-VANADIUM ORES												
United States, total.....	188	34	5.4	40.5	4.1	8.5	28.9	142.1	116.6	218.2	40.5	6.7	190.6
Type Of Operation													
Producing establishments, total.....	174	32	5.1	38.2	3.9	8.0	27.2	144.7	94.3	218.2	20.7	6.5	190.6
Mines only.....	144	12	1.1	7.5	1.0	2.1	6.4	23.3	11.2	29.9	4.6	2.0	61.3
Mines with preparation plants.....	10	10	3.0	23.4	2.4	4.9	17.7	100.6	53.9	141.6	12.9	3.5	106.8
Nonproducing establishments.....	14	2	0.3	2.3	0.3	0.6	1.7	-2.6	22.3	-	19.8	0.1	(Z)
	INDUSTRY 1099.--METALLIC ORES, N.E.C.												
United States, total.....	38	4	0.3	2.4	0.3	0.6	2.0	7.1	(D)	14.8	(D)	0.2	1.6

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. (Z) Less than \$50 thousand.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967

Item	1081--Metal Mining Services				1092.--Mercury ores United States, total	1093.--Titanium ores United States, total
	United States, total	West region				
		Region, total	Mountain division	Pacific division		
Establishments, total.....number..	148	96	78	18	62	7
With 1 to 19 employees.....do....	114	72	56	16	53	1
With 20 to 99 employees.....do....	26	18	16	2	8	2
With 100 employees or more.....do....	8	6	6	-	1	4
All employees (average for the year).....1,000..	2.6	1.9	1.7	0.2	0.7	0.9
Payroll (all employees), total for year..million dollars..	19.1	13.7	12.5	1.3	4.7	6.4
Production, development, and exploration workers:						
Average for the year.....1,000..	2.4	1.7	1.5	0.2	0.6	0.7
March.....do....	2.4	1.7	1.5	0.2	0.6	0.8
May.....do....	2.5	1.8	1.6	0.2	0.6	0.7
August.....do....	2.4	1.7	1.6	0.1	0.6	0.7
November.....do....	2.3	1.6	1.5	0.1	0.6	0.7
Man-hours.....millions..	4.5	3.2	2.9	0.3	1.2	1.4
January-March.....do....	1.1	0.8	0.7	0.1	0.3	0.4
April-June.....do....	1.2	0.8	0.7	0.1	0.3	0.4
July-September.....do....	1.1	0.8	0.8	0.1	0.3	0.3
October-December.....do....	1.1	0.8	0.7	0.1	0.3	0.4
Wages.....million dollars..	16.3	11.2	10.0	1.2	3.8	4.9
Supplemental labor cost not included in payroll.....do....	2.3	1.5	1.4	0.2	0.5	1.0
Legally required expenditures, including Social Security contributions.....do....	1.8	1.2	1.1	0.2	0.4	0.4
Payments for voluntary program.....do....	0.5	0.3	0.3	(Z)	0.1	0.7
Cost of supplies, etc., total.....do....	17.2	12.6	11.6	1.0	(D)	7.5
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	14.8	11.3	10.4	0.9	(D)	5.0
Cost of resales.....do....	(Z)	(Z)	(Z)	(Z)	(D)	-
Purchased fuels consumed.....do....	1.0	0.7	0.7	0.1	(D)	0.5
Electric energy:						
Purchased:						
Quantity.....million kw.-hrs..	1.2	1.1	1.1	-	(D)	142.6
Cost.....million dollars..	(Z)	(Z)	(Z)	-	(D)	1.3
Generated less sold.....million kw.-hrs..	-	-	-	-	(D)	-
Contract work.....million dollars..	1.4	0.5	0.4	0.1	(D)	0.7
Value of shipments and receipts (including resales), total.....do....	48.3	31.8	28.6	3.2	10.6	23.5
Value of resales.....do....	(Z)	(Z)	(Z)	(Z)	(Z)	-
Value added in mining.....do....	33.6	21.0	18.7	2.3	8.3	17.3
Capital expenditures (except land and mineral rights), total.....do....	2.3	1.9	1.7	0.1	(D)	1.3
Mineral development and exploration.....do....	(Z)	(Z)	(Z)	-	(D)	(Z)
New structures and additions.....do....	(Z)	(Z)	(Z)	(Z)	(D)	(Z)
New machinery and equipment.....do....	2.1	1.7	1.5	0.1	(D)	1.3
Used plant and equipment.....do....	0.2	0.2	0.2	(Z)	(D)	(Z)
Gross book value of fixed assets, total.....do....	25.9	19.7	18.6	1.1	8.4	35.5
Mineral properties.....do....	-	-	-	-	2.1	2.2
Building and other structures (excluding land).....do....	1.0	0.8	0.8	(Z)	1.4	8.6
Machinery and equipment.....do....	24.9	18.8	17.8	1.1	5.0	24.8
Mineral development and exploration expenditures, total.....do....	0.6	0.2	(Z)	0.1	0.4	(Z)
Capitalized.....do....	(Z)	(Z)	(Z)	(Z)	0.2	(Z)
Expensed.....do....	0.6	0.2	(Z)	0.1	0.3	-
Mineral rights and geological expenditures.....do....	0.1	0.1	(Z)	(Z)	0.1	-
Lease and land acquisition of nonproducing acreage.....do....	-	-	-	-	(Z)	-
Geological and geophysical.....do....	0.1	0.1	(Z)	(Z)	(Z)	-
Lease rents.....do....	(Z)	(Z)	(Z)	-	0.1	-
Net shipments of primary product.....1,000 short tons..						
Crude minerals mined during 1967, by ownership.....do....	(NA)	(NA)	(NA)	(NA)	0.3	28.0
Production for own account.....do....	(NA)	(NA)	(NA)	(NA)	0.3	(D)
Production for accounts of others.....do....	(NA)	(NA)	(NA)	(NA)	-	-
Royalty production.....do....	(NA)	(NA)	(NA)	(NA)	0.1	(D)
Royalties paid.....million dollars..	(NA)	(NA)	(NA)	(NA)	0.2	(D)
Undistributed.....1,000 short tons..	(NA)	(NA)	(NA)	(NA)	(Z)	-
Man-hours worked by production, development, and exploration workers, total.....millions..	4.5	3.2	2.9	0.3	1.2	1.4
At mines, total.....do....	(X)	(X)	(X)	(X)	0.9	1.0
Underground ¹.....do....	3.3	2.6	2.3	0.2	0.5	-
Open-pit ².....do....	0.2	0.2	0.2	(Z)	0.2	0.7
Surface ³ (including mine shops and yards) ³.....do....	-	-	-	-	0.2	0.3
At preparation plants ⁴.....do....	1.0	0.5	0.4	(Z)	0.3	0.4
Man-hours spent on exploration and development (included above).....do....	(X)	(X)	(X)	(X)	0.1	(Z)
Net shipments of primary product.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	United States, total all operations	1094.--Uranium-Radium-Vanadium ores						1099--Metallic ores, n.e.c. United States, total
		Geographic areas		Type of operation			Non-producing establishments	
		Total	Mines only	Mines with preparations plants				
Establishments, total.....number..	188	(D)	(D)	174	144	10	14	38
With 1 to 19 employees.....do....	154	(D)	(D)	142	132	-	12	34
With 20 to 99 employees.....do....	17	(D)	(D)	17	10	2	-	3
With 100 employees or more.....do....	17	(D)	(D)	15	2	8	2	1
All employees (average for the year).....1,000..	5.4	(D)	(D)	5.1	1.1	3.0	0.3	0.3
Payroll (all employees), total for year..million dollars..	40.5	(D)	(D)	38.2	7.5	23.4	2.3	2.4
Production, development, and exploration workers:								
Average for the year.....1,000..	4.1	(D)	(D)	3.9	1.0	2.4	0.3	0.3
March.....do....	3.9	(D)	(D)	3.7	1.0	2.2	0.2	0.3
May.....do....	4.1	(D)	(D)	3.8	1.0	2.3	0.2	0.3
August.....do....	4.3	(D)	(D)	4.0	1.1	2.4	0.3	0.3
November.....do....	4.3	(D)	(D)	4.0	1.0	2.5	0.3	0.3
Man-hours.....millions..	8.5	(D)	(D)	8.0	2.1	4.9	0.6	0.6
January-March.....do....	2.0	(D)	(D)	1.9	0.5	1.2	0.1	0.2
April-June.....do....	2.1	(D)	(D)	1.9	0.5	1.2	0.1	0.2
July-September.....do....	2.2	(D)	(D)	2.0	0.5	1.2	0.2	0.2
October-December.....do....	2.3	(D)	(D)	2.1	0.5	1.3	0.2	0.1
Wages.....million dollars..	28.9	(D)	(D)	27.2	6.4	17.7	1.7	2.0
Supplemental labor cost not included in payroll.....do....	4.8	(D)	(D)	4.6	0.6	3.6	0.3	0.3
Legally required expenditures, including Social Security contributions.....do....	2.3	(D)	(D)	2.2	0.4	1.5	0.1	0.2
Payments for voluntary program.....do....	2.5	(D)	(D)	2.4	0.2	2.1	0.1	0.1
Cost of supplies, etc., total.....do....	116.6	(D)	(D)	94.3	11.2	53.9	22.3	(D)
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	82.8	(D)	(D)	77.9	5.0	45.7	5.0	(D)
Cost of resales.....do....	0.1	(D)	(D)	0.1	-	0.1	-	(D)
Purchased fuels consumed.....do....	3.3	(D)	(D)	3.1	0.3	2.0	0.2	(D)
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	279.3	(D)	(D)	270.1	51.0	168.4	9.2	(D)
Cost.....million dollars..	3.5	(D)	(D)	3.4	0.8	2.1	0.1	(D)
Generated less sold.....million kw.-hrs..	42.5	(D)	(D)	42.5	0.9	37.4	(Z)	(D)
Contract work.....million dollars..	26.8	(D)	(D)	9.8	5.2	4.0	17.0	(D)
Value of shipments and receipts (including resales), total.....do....	218.2	(D)	(D)	218.2	29.9	141.6	-	14.8
Value of resales.....do....	(D)	(D)	(D)	(D)	-	(D)	-	(D)
Value added in mining.....do....	142.1	(D)	(D)	144.7	23.3	100.6	-2.6	7.1
Capital expenditures (except land and mineral rights), total.....do....	40.5	(D)	(D)	20.7	4.6	12.9	19.8	(D)
Mineral development and exploration.....do....	11.9	(D)	(D)	10.5	3.4	6.8	1.4	(D)
New structures and additions.....do....	17.6	(D)	(D)	2.6	(Z)	1.3	14.9	(D)
New machinery and equipment.....do....	10.8	(D)	(D)	7.3	1.0	4.8	3.5	(D)
Used plant and equipment.....do....	0.2	(D)	(D)	0.2	0.1	(Z)	(Z)	(D)
Gross book value of fixed assets, total.....do....	301.0	(D)	(D)	273.6	59.1	185.9	27.4	16.3
Mineral properties.....do....	91.2	(D)	(D)	86.8	41.8	45.1	4.4	2.3
Building and other structures (excluding land).....do....	101.9	(D)	(D)	83.4	4.8	66.8	18.6	3.2
Machinery and equipment.....do....	107.9	(D)	(D)	103.4	12.5	74.1	4.4	10.9
Mineral development and exploration expenditures, total.....do....	14.6	(D)	(D)	12.9	4.3	7.9	1.6	0.3
Capitalized.....do....	11.9	(D)	(D)	10.6	3.4	6.8	1.3	0.1
Expensed.....do....	2.7	(D)	(D)	2.4	0.8	1.2	0.3	0.1
Mineral rights and geological expenditures.....do....	4.0	(D)	(D)	2.7	0.6	1.4	1.3	(D)
Lease and land acquisition of nonproducing acreage.....do....	1.7	(D)	(D)	1.1	0.1	0.6	0.6	-
Geological and geophysical.....do....	1.3	(D)	(D)	1.0	0.2	0.6	0.3	(D)
Lease rents.....do....	0.9	(D)	(D)	0.5	0.2	0.2	0.4	(D)
Net shipments of primary product.....1,000 short tons..								
Crude minerals mined during 1967, by ownership.....do....	5.5	(D)	(D)	(D)	(D)	4.3	(D)	(D)
Production for own account.....do....	2.1	(D)	(D)	2.1	0.1	2.0	(Z)	(D)
Production for accounts of others.....do....	0.1	(D)	(D)	0.1	(Z)	(Z)	-	-
Royalty production.....do....	2.7	(D)	(D)	(D)	(D)	1.7	(X)	-
Royalties paid.....million dollars..	4.7	(D)	(D)	4.7	1.3	3.4	(Z)	-
Undistributed.....1,000 short tons..	0.7	(D)	(D)	0.7	0.1	0.6	-	-
Man-hours worked by production, development, and exploration workers, total.....millions..	8.5	(D)	(D)	8.0	2.1	4.9	0.6	0.6
At mines, total.....do....	5.5	(D)	(D)	5.2	2.1	3.1	0.3	0.3
Underground ¹.....do....	4.0	(D)	(D)	3.8	1.7	2.2	0.2	-
Open-pit ².....do....	0.5	(D)	(D)	0.4	0.1	0.3	0.1	(D)
Surface ³ (including mine shops and yards) ³.....do....	1.0	(D)	(D)	0.9	0.3	0.6	0.1	(D)
At preparation plants ⁴.....do....	3.1	(D)	(D)	2.8	-	1.8	0.3	0.3
Man-hours spent on exploration and development (included above).....do....	0.7	(D)	(D)	0.7	0.2	0.5	0.1	(Z)
Net shipments of primary product.....do....	(NA)	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Represents less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹For metal mining service industries, represents man-hours on exploration work, including geophysical and other exploratory surveying.²For metal mining service industries, represents man-hours on stripping overburden.³For metal mining service industries, represents man-hours on mining minerals for the account of others.⁴For metal mining services, represents man-hours on other services, such as sinking mine shafts, driving mine tunnels, and drilling.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1081	Metal mining services:										
	Establishments, total.....	148	2.6	19.1	2.4	4.5	16.3	33.6	17.2	48.3	2.3
	Establishments with an average of--										
	0 to 4 employees.....	70	0.1	0.6	0.1	0.2	0.6	1.5	1.2	2.4	0.2
	5 to 9 employees.....	20	0.1	0.7	0.1	0.2	0.6	1.2	0.7	1.7	0.2
	10 to 19 employees.....	24	0.3	2.2	0.3	0.6	2.1	4.4	2.1	6.0	0.4
	20 to 49 employees.....	18	0.5	3.0	0.4	0.8	2.9	6.6	2.7	8.7	0.5
	50 to 99 employees.....	8	0.5	3.6	0.5	0.9	3.4	6.5	3.8	9.9	0.3
	100 to 249 employees.....	8	1.1	9.0	1.0	1.8	6.9	13.5	6.8	19.5	0.7
	Estabs. covered by admin. records ¹	34	(Z)	0.2	(Z)	0.1	0.2	0.8	0.3	1.0	0.1
1092	Mercury ores:										
	Establishments, total.....	62	0.7	4.7	0.6	1.2	3.8	8.3	(D)	10.6	(D)
	Establishments with an average of--										
	0 to 4 employees.....	34	(Z)	0.2	(Z)	0.1	0.2	0.2	(D)	0.3	(D)
	5 to 9 employees.....	9	0.1	0.4	0.1	0.1	0.4	0.4	(D)	0.8	(D)
	10 to 19 employees.....	10	0.2	1.7	0.2	0.5	1.4	3.6	(D)	4.4	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	3	0.3	2.4	0.3	0.6	1.8	4.0	(D)	5.0	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	23	(Z)	0.1	(Z)	0.1	0.1	0.2	0.1	0.3	(Z)
1093	Titanium ores:										
	Establishments, total.....	7	0.9	6.4	0.7	1.4	4.9	17.3	7.5	23.5	1.3
	Establishments with an average of--										
	10 to 19 employees.....	1	0.9	6.4	0.7	1.4	4.9	17.3	7.5	23.5	1.3
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1094	Uranium-Radium-Vanadium ores:										
	Establishments, total.....	188	5.4	40.5	4.1	8.5	28.9	142.1	116.6	218.2	40.5
	Establishments with an average of--										
	0 to 4 employees.....	103	0.1	0.7	0.1	0.2	0.6	3.3	1.4	4.3	0.3
	5 to 9 employees.....	29	0.2	1.4	0.1	0.3	0.9	3.1	2.0	4.0	1.1
	10 to 19 employees.....	22	0.3	2.1	0.2	0.4	1.2	2.1	3.5	3.6	2.1
	20 to 49 employees.....	14	0.4	2.6	0.3	0.5	1.7	8.6	4.5	12.8	.3
	50 to 99 employees.....	3	0.2	1.2	0.2	0.3	0.9	5.2	6.4	9.8	1.8
	100 to 249 employees.....	12	1.8	12.8	1.3	2.9	8.8	49.8	60.1	85.4	24.4
	250 to 499 employees.....	3	2.4	19.7	1.9	3.9	14.7	70.0	38.8	98.2	10.4
	500 to 999 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	71	0.1	0.4	0.1	0.1	0.3	1.5	0.7	2.0	0.2
1099	Metallic ores, n.e.c.:										
	Establishments, total.....	38	0.3	2.4	0.3	0.6	2.0	7.1	(D)	14.8	(D)
	Establishments with an average of--										
	0 to 4 employees.....	31	(Z)	0.2	(Z)	0.1	0.2	0.6	(D)	0.6	(D)
	5 to 9 employees.....	1	(Z)	0.2	(Z)	(Z)	0.1	0.4	(D)	0.8	(D)
	10 to 19 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	3	0.3	2.1	0.3	0.6	1.7	6.1	(D)	13.4	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	22	(Z)	0.1	(Z)	(Z)	0.1	0.4	0.1	0.4	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. (Z) Represents less than one-half of the unit of measure specified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 10 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1968

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1081	Metal mining services.....1967..	48.3	45.7	(D)	(D)	(Z)	45.7	45.7	(Z)
	1963..	32.4	31.0	(D)	(D)	(Z)	31.1	31.0	0.1
1092	Mercury ores.....1967..	10.6	10.5	(D)	(D)	(D)	¹ 10.9	(D)	(D)
	1963..	3.7	3.6	-	(Z)	-	¹ 3.6	¹ 3.6	-
1093	Titanium ores.....1967..	23.5	17.2	6.3	-	-	² 18.7	² 17.2	² 1.5
	1963..	22.0	(D)	(D)	-	-	² 16.8	(D)	(D)
1094	Uranium-radium-vanadium ores.....1967..	218.2	216.4	(D)	1.3	(D)	³ 180.8	³ 180.8	-
	1963..	326.4	318.1	(D)	(D)	(D)	³ 236.5	³ 236.5	-
1099	Metallic ores, n.e.c.....1967..	14.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1963..	3.0	(D)	(D)	(D)	(D)	3.6	(D)	(D)

Note: Detailed figures may not add to totals because of independent rounding. (Z) Less than \$50 thousand.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹Represents gross shipments of mercury metal.

²Represents gross shipments of titanium concentrates.

³Represents gross shipments less minerals received for preparation.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Service code	Type of service and geographic area		Total receipts for services (million dollars)					
			1967 ¹		1963			
	UNITED STATES		INDUSTRY 1081.--METAL MINING SERVICES					
1081--	Receipts for services, total.....		45.7		31.1			
10818 01	Exploration work, including geophysical and other exploratory surveying.....		7.2		7.5			
10818 03	Prospect and test drilling.....		24.6		8.0			
10818 05	Other drilling, including blasting.....		13.9		0.1			
10818 07	Sinking mine shafts and driving mine tunnels.....				3.2			
10818 02	Stripping overburden.....				6.6			
10818 04	Mining minerals for others.....				5.8			
Product code	Product and geographic areas	Unit of measure	1967			1963		
			Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
				Quantity	Value (million dollars)		Quantity	Value (million dollars)
	UNITED STATES		INDUSTRY 1092.--MERCURY ORES					
1092--	Mercury ores, total.....	.....	(X)	(X)	(D)	(X)	(X)	(D)
10921 01	Crude mercury ores.....	1,000 short tons	373.8	(D)	(D)	118.7	(D)	(D)
10923 01	Mercury metal.....	1,000 flasks (76 lbs.).....	22.0	22.7	10.9	19.2	18.8	3.6
	UNITED STATES		INDUSTRY 1093.--TITANIUM ORES					
1093--	Titanium ores, total.....	.....	(X)	(X)	18.7	(X)	(X)	16.8
10931 01	Crude titanium ores.....	1,000 short tons	27,981.8	(X)	(X)	25,720.0	(X)	(X)
10932 0--	Titanium concentrates, total.....	...do.....	944.7	893.2	18.7	901.3	902.2	16.8
10932 03	Ilmenite.....	...do.....	944.7	893.2	18.7	888.9	889.4	15.6
10932 05	Rutile.....	...do.....				12.4	12.8	1.3
	UNITED STATES		INDUSTRY 1094.--URANIUM-RADIUM-VANADIUM ORES					
1094--	Uranium-vanadium ores, total.....	.....	(X)	(X)	216.4	(X)	(X)	318.1
10941 --	Crude uranium-vanadium ores, total.....	Million short tons.....	5.5	1.7	29.2	6.4	2.8	77.0
10941 01	Crude ores shipped.....	...do.....	(X)	1.7	29.2	(X)	2.8	77.0
10941 03	Crude ore mined from underground operations.....	...do.....	4.2	(X)	(X)	4.2	(X)	(X)
10941 05	Crude ore mined from open-pit operations.....	...do.....	1.3	(X)	(X)	2.2	(X)	(X)
10942 01	Uranium-vanadium concentrates ²	1,000 short tons	30.6	30.7	187.1	³ 110.4	³ 107.0	³ 241.1
	Wyoming							
1094--	Uranium-vanadium ores, total.....	.....	(X)	(X)	(D)	(X)	(X)	57.5
10941 --	Crude uranium-vanadium ores.....	Million short tons.....	1.4	(D)	(D)	1.4	0.6	12.4
10942 01	Uranium-vanadium concentrates ²	1,000 short tons	2.8	2.2	32.5	69.8	69.8	45.1
	New Mexico							
1094--	Uranium-vanadium ores, total.....	.....	(X)	(X)	(D)	(X)	(X)	97.5
10941 --	Crude uranium-vanadium ores.....	Million short tons.....	2.8	(D)	(D)	2.6	0.6	12.2
10942 01	Uranium-vanadium concentrates ²	1,000 short tons	7.5	6.5	79.6	6.6	6.6	85.3
			INDUSTRY 1099.--METALLIC ORES, N.E.C.					
	UNITED STATES							
1099--	Metallic ores, n.e.c., total.....	.....	(X)	(X)	16.3	(X)	(X)	5.2
10992 01	Metallic ores, n.e.c., concentrates.....	.....	(X)	(X)	16.3	(X)	(X)	5.2
10993 01								

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: (X) Not applicable. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹Excludes receipts for services performed for metal mining establishments by companies not classified in the metal mining services industry.

²Concentrates include slurry and low-grade concentrates shipped to mills for further upgrading.

³Concentrates include lignite ash valued chiefly for its uranium content.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1081.--METAL MINING SERVICES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, purchased machinery installed, and fuel used, total.....		(X)	15.7	(X)	¹ 10.2
	Selected supplies and purchased machinery installed, total.....		(X)	14.8	(X)	¹ 9.0
353011	Purchased machinery installed.....		(X)	1.7	(X)	3.8
970099	All other supplies.....		(X)	10.2	(X)	¹ 5.2
974000	Undistributed supplies and purchased machinery installed ²		(X)	2.9	(X)	
	Fuels used, total.....		(X)	1.0	(X)	1.2
291111	Gasoline.....	Thousand gal....	2,090	0.7	1,525	0.4
977000	Undistributed fuels used ²		(X)	0.2	(X)	(Z)
			INDUSTRY 109.--MISCELLANEOUS METAL ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	104.5	(X)	¹ 144.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	99.8	(X)	¹ 140.6
100097	Ores for preparation:					
	Crude ores received for preparation.....	Million short tons.....	82.1	(³)	(NA)	82.3
100097	Crude ores produced and prepared at same establishment.....	do.....		(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	(³)	(X)	11.0
	Supplies used:					
970099	All other supplies.....		(X)	³ 98.0	(X)	¹ 47.3
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	1.8	(X)	1.1
	Fuel used, total.....		(X)	4.7	(X)	4.0
131300	Gas natural, manufactured, and mixed.....	Million cu. ft..	4,884.7	1.8	5,302.0	1.7
291111	Gasoline.....	Thousand gal....	1,511.0	0.4	1,834.0	0.5
977000	Undistributed fuels ²		(X)	0.4	(X)	0.2
			INDUSTRY 1093.--TITANIUM ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	5.5	(X)	¹ 6.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.0	(X)	¹ 5.9
100097	Ores for preparation:					
	Crude ores produced and prepared at same establishment.....	Thousand short tons.....	26,269.0	(X)	25,720.0	(X)
353011	Purchased machinery installed.....		(X)	1.4	(X)	2.1
	Supplies used:					
331201	Steel mill shapes and forms.....	do.....	1.3	0.3		¹ 3.8
970099	All other supplies.....		(X)	3.3		
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	-	(X)	
	Fuels used, total.....		(X)	0.5		0.5

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1094--URANIUM-RADIUM-VANADIUM ORES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	86.0	(X)	¹ 135.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	82.8	(X)	¹ 131.9
	Ores and other uranium-vanadium bearing materials for preparation:					
100097	Crude ores and concentrates received for preparation.....	Million short tons.....	1.6	35.6	2.9	81.6
100097	Crude ores and concentrates produced and prepared at same establishment.....	...do.....	3.9	(X)	3.5	(X)
353011	Purchased machinery installed.....		(X)	15.7	(X)	8.6
	Supplies used:					
289211	Explosives.....	Million pounds..	6.7	1.1	(X)	¹ 41.7
289212	Blasting accessories.....		(X)	0.3		
289214	Steel mill shapes and forms.....	1,000 short tons	10.5	3.5		
331201	All other supplies.....		(X)	25.2		
970099						
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	1.3		
	Fuels used, total.....		(X)	3.3	(X)	3.3
977000	Undistributed fuels used ²		(X)	0.2	(X)	0.1
	NEW MEXICO					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	34.3	(X)	¹ 34.8
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	32.9	(X)	¹ 33.8
353011	Purchased machinery installed.....		(X)	8.0	(X)	4.7
	Supplies used:					
289211	Explosives.....	Million pounds..	3.2	0.6	4.2	0.8
289212	Blasting accessories.....		(X)	0.3	(X)	¹ 29.2
289214	All other supplies.....		(X)	24.0		
970099						
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	(Z)	(X)	0.1
	Fuels used, total.....		(X)	1.4	(X)	1.0
	<u>Type of Operation</u>					
	Mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	48.4	(X)	¹ 96.5
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	45.7	(X)	¹ 94.0
353011	Purchased machinery installed.....		(X)	9.3	(X)	8.9
	Supplies used:					
289211	Explosives.....	Million pounds..	2.8	0.5	(X)	¹ 85.1
289212	Blasting accessories.....		(X)	0.2		
289214	All other supplies.....		(X)	35.4		
970099						
974000	Undistributed supplies, minerals received for preparation and purchased machinery installed ²		(X)	0.3		
	Fuels used, total.....		(X)	2.7	(X)	2.5

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (NA) Not available. (X) Not applicable. (Z) Represents less than one-half of the unit of measure specified.

¹Includes the cost of products bought and resold without further processing.²This item represents the total cost of supplies or fuels for establishments that did not report detailed cost data. For 1967, this also includes estimates for establishments that were not mailed report forms.³Included with all other supplies.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

COAL MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Major Group 11, Anthracite Mining, and Major Group 12, Bituminous Coal and Lignite Mining. The separate industries included in these major groups and the reports in which they appear are:

Report	Industries Covered
MIC67(1)-11A-- Anthracite Mining	{ 1111--Anthracite 1112--Anthracite mining services
MIC67(1)-12A-- Bituminous Coal and Lignite Mining	{ 1211--Bituminous coal 1212--Lignite 1213--Bituminous coal and lignite mining services, not elsewhere classified

Major Group 11, Anthracite Mining, represents establishments primarily engaged in producing anthracite (hard coal). Mining operations, dredging operations, and preparation plants also known as cleaning plants, breakers, and washeries, whether or not such plants are operated in conjunction with the mine served, are included. Major Group 12, Bituminous Coal and Lignite Mining, represents establishments primarily engaged in producing bituminous coal or lignite. Included are mining operations and preparation plants, also known as cleaning plants, washeries, crushing plants, and screening and sizing plants, whether or not such plants are operated in conjunction with the mine served. The production of fuel briquets and packaged fuel is classified in Major Group 29, the production of coke in industry 3312, and the production of manufactured gas from coal in industry 4925.

Establishments were classified by industry on the basis of the kind of coal produced--anthracite, bituminous coal, and lignite; or in the case of service establishments, on the basis of the industry principally served and the principal kind of work done. The statistics for anthracite relate only to its production in eastern Pennsylvania, including, because of its proximity to the anthracite counties, the semianthracite produced in the Bernice Basin in Sullivan County. The statistics for bituminous coal and lignite cover all other coal mining activity in the United States. The bituminous coal statistics include subbituminous, semianthracite, and all coal sometimes classified as anthracite which is mined outside of Pennsylvania.

The combined value of shipments and receipts in 1967 of all industries in Major Groups 11 and 12 was \$3,100.6 million. Establishments in the Anthracite Industry accounted for \$146.0 million and the Anthracite Mining Services Industry for \$9.9 million. The Bituminous Coal Industry accounted for \$2,897.5 million, the Lignite Industry for \$17.9 million, and the Bituminous Coal and Lignite Mining Services Industry for \$29.3 million.

This report presents in table 1 comparative general statistics for all coal mining industries combined for the census years 1840-1967. Table 2 presents general statistics by industry for the United States and for geographic areas. Table 3 shows number of establishments, employment, and value added in mining by major types of operation for the same geographic areas. In table 4 detailed statistics are shown by industry for the United States.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1967:											
Coal mining industries, total.....	¹ 4,484	1,124	131.5	967.3	115.1	224.0	811.8	2,091.3	1,350.0	3,100.6	340.7
Coal industries.....	¹ 4,337	1,095	129.3	952.4	113.1	219.9	798.2	2,062.2	1,335.2	3,061.4	336.0
Coal mining services industries.....	¹ 147	29	2.2	14.9	2.0	4.1	13.6	29.1	14.8	39.2	4.7
1963:											
Coal mining industries, total.....	7,374	1,268	145.6	821.1	129.0	237.2	700.8	1,727.2	494.4	2,632.9	233.5
Coal industries.....	7,200	1,234	143.3	808.3	126.7	233.1	689.5	1,700.4	483.3	2,593.4	228.1
Coal mining services industries.....	174	34	2.4	12.8	2.2	4.1	11.4	26.8	11.1	39.5	5.3
1958:											
Coal mining industries, total.....	8,188	1,534	210.8	1,008.5	183.8	299.0	841.5	1,780.2	495.8	2,756.0	205.1
Coal industries.....	7,946	1,471	206.2	987.2	179.6	292.0	823.0	1,742.8	478.9	2,699.6	198.5
Coal mining services industries.....	242	63	4.6	21.3	4.2	7.0	18.5	37.4	16.9	56.4	6.6
1954:											
Coal mining industries, total.....	8,301	1,712	256.7	1,013.3	233.0	374.7	881.3	1,621.0	430.5	2,483.2	130.6
Coal industries.....	8,004	1,633	250.5	989.4	227.5	366.1	860.5	1,578.7	415.2	2,422.7	125.6
Coal mining services industries.....	297	79	6.1	23.9	5.5	8.7	20.8	42.3	15.3	60.5	5.0
1939: ²											
Coal mining industries, total.....	(NA)	(NA)	479.4	596.7	454.1	670.9	540.0	764.7	154.8	(NA)	(NA)
Coal industries.....	³ 6,365	(NA)	476.3	592.2	451.2	665.4	536.3	756.6	150.9	(NA)	(NA)
Coal mining services industries.....	(NA)	(NA)	3.1	4.5	2.9	4.7	3.7	8.1	3.9	12.1	1.1
1935: ^{2 4}											
Coal mining industries, total.....	(NA)	(NA)	551.7	570.0	527.9	(NA)	522.8	(NA)	(NA)	(NA)	(NA)
Coal industries.....	⁵ 6,661	(NA)	548.4	565.8	524.8	(NA)	519.0	729.6	139.3	(NA)	(NA)
Coal mining services ⁶	(NA)	(NA)	3.3	4.1	3.1	(NA)	3.7	(NA)	2.8	(NA)	(NA)
Coal industries only:											
1929 ²	5,193	(NA)	633.7	884.8	601.6	(NA)	804.9	1,140.7	202.1	(NA)	(NA)
1919.....	6,924	(NA)	734.8	975.5	693.8	(NA)	893.7	1,252.1	253.4	1,510.4	(NA)
1909.....	4,765	(NA)	680.0	388.1	657.8	(NA)	363.0	462.3	84.4	550.8	(NA)
1902 ^{2 7}	³ 6,017	(NA)	368.2	237.9	⁸ 350.3	(NA)	220.5	327.6	37.7	(NA)	(NA)
1889 ²	⁹ 12,552	(NA)	299.6	109.1	291.5	(NA)	103.4	138.2	18.8	(NA)	(NA)
1880 ²	¹⁰ 8,419	(NA)	180.0	55.9	(NA)	(NA)	(NA)	84.2	11.6	(NA)	(NA)
1870 ²	1,566	(NA)	94.8	44.3	(NA)	(NA)	(NA)	67.9	5.7	(NA)	(NA)
1860 ²	622	(NA)	36.5	9.7	(NA)	(NA)	(NA)	17.5	2.8	(NA)	(NA)
1850 ²	510	(NA)	15.1	4.1	(NA)	(NA)	(NA)	6.9	0.2	(NA)	(NA)
1840 ²	(NA)	(NA)	6.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

¹In 1967, for the first time data for single unit establishments without paid employees were excluded from the census. In 1963, there were 1,347 single unit coal establishments without paid employees (1,370 mining establishments and 7 service establishments). In the 1963 census for mining as a whole, establishments without paid employees accounted for approximately 3 percent of value added.

²Excludes data for Alaska.

³Represents number of mines, culm banks, and dredges.

⁴Represents production operations only.

⁵For the Bituminous Coal and Lignite Industries, represents number of mines.

⁶Represents anthracite stripping services only.

⁷For 1902, data were also obtained from the operators of coal mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 6,906.

⁸Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

⁹Includes data for 9,920 "local mines and farmers' banks," producing about 2 percent of all bituminous coal and lignite, for which no data are available on labor and expenditures. For number of establishments, see also footnote 3.

¹⁰Includes data for 5,148 bituminous coal and lignite mines, producing 917 thousand tons of coal value at \$1,093 thousand, representing "irregular" operations for which no other data are available.

TABLE 2. General Statistics by Industries and Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry ¹ and Geographic Area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	United States, total.....	4,484	1,124	131.5	967.3	115.1	224.0	811.8	2,091.3	1,350.0	3,100.6	340.7	145.6	1,727.2
	Coal industries.....	4,337	1,095	129.3	952.4	113.1	219.9	798.2	2,062.2	1,335.2	3,061.4	336.0	143.3	1,700.4
	Coal mining services industries.....	147	29	2.2	14.9	2.0	4.1	13.6	29.1	14.8	39.2	4.7	2.4	26.8
11	Anthracite mining, total.....	403	69	7.2	41.1	6.3	11.6	35.0	82.1	80.2	155.9	6.4	11.8	120.5
1111	Anthracite.....	371	58	6.4	36.6	5.5	10.3	30.9	74.7	76.3	146.0	5.0	10.7	110.5
1112	Anthracite mining services....	32	11	0.8	4.5	0.7	1.3	4.1	7.4	3.9	9.9	1.4	1.1	10.0
12	Bituminous coal and lignite mining, total.....	4,081	1,055	124.4	926.2	108.9	212.4	776.8	2,009.2	1,269.7	2,944.7	334.3	133.9	1,606.7
1211	Bituminous coal.....	3,921	1,030	122.5	912.5	107.2	208.8	764.7	1,974.6	1,252.4	2,897.5	329.5	132.0	1,578.1
1212	Lignite.....	45	7	0.5	3.3	0.4	0.8	2.6	12.9	6.5	17.9	1.5	0.5	11.8
1213	Bituminous and lignite mining services, n.e.c.....	115	18	1.4	10.4	1.3	2.8	9.5	21.7	10.9	29.3	3.3	1.3	16.8
	NORTHEAST REGION													
	Pennsylvania:													
	Coal mining, total.....	1,146	262	30.2	215.3	26.0	50.9	177.3	413.5	339.4	692.3	60.5	² 36.2	401.5
	Coal industries.....	1,080	246	29.1	208.7	25.0	48.9	171.3	401.5	332.9	676.4	58.1	² 34.6	386.4
	Coal mining service industries.....	66	16	1.1	6.6	1.0	2.0	6.0	12.0	6.5	15.9	2.4	1.5	15.2
11	Anthracite mining, total.....	403	69	7.2	41.1	6.3	11.6	35.0	82.1	80.2	155.9	6.4	² 11.8	120.5
1111	Anthracite.....	371	58	6.4	36.6	5.5	10.3	30.9	74.7	76.3	146.0	5.0	² 10.7	110.5
1112	Anthracite mining services....	32	11	0.8	4.5	0.7	1.3	4.1	7.4	3.9	9.9	1.4	1.1	10.0
12	Bituminous coal and lignite mining, total.....	743	193	23.1	174.2	19.8	39.3	142.4	332.2	258.7	536.7	54.2	24.4	281.0
1211	Bituminous coal.....	709	188	22.8	172.1	19.5	38.6	140.5	327.7	256.2	530.7	53.2	24.0	275.8
1213	Bituminous and lignite mining services, n.e.c.....	34	5	0.3	2.1	0.3	0.7	1.9	4.5	2.6	6.1	1.1	0.5	5.1
	EAST NORTH CENTRAL DIVISION													
12	Bituminous coal and lignite mining, total.....	398	164	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	20.4	310.4
1211	Bituminous coal.....	383	162	19.3	168.8	16.2	35.3	137.4	389.9	203.5	541.4	51.9	20.3	307.8
1213	Bituminous and lignite mining services.....	15	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.2	2.6
12	Ohio:													
	Bituminous coal and lignite mining, total.....	264	85	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	8.5	107.1
1211	Bituminous coal.....	251	83	8.3	66.5	6.8	14.3	50.5	135.0	(D)	211.6	(D)	8.3	104.9
1213	Bituminous and lignite mining services, n.e.c.....	13	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.2	2.3
12	Indiana:													
	Bituminous coal and lignite mining.....	52	20	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.0	46.2
1211	Bituminous coal.....	52	20	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.0	46.0
12	Illinois:													
	Bituminous coal and lignite mining.....	82	59	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	9.0	157.0
1211	Bituminous coal.....	80	59	8.8	82.8	7.6	17.2	70.7	193.4	86.6	254.4	25.7	9.0	157.0
	WEST NORTH CENTRAL DIVISION													
12	Bituminous coal and lignite mining.....	83	17	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.0	(D)
1211	Bituminous coal.....	48	12	1.7	10.4	0.7	1.5	5.6	19.5	6.8	24.8	1.5	1.7	17.9
1212	Lignite.....	33	5	0.3	2.1	0.3	0.6	1.6	5.5	5.3	9.4	1.3	(NA)	(NA)
1211	Iowa:													
	Bituminous coal and lignite mining.....	21	3	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	3.5
	Bituminous coal.....	21	3	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	3.4
1211	Missouri (bituminous coal).....	21	6	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.1	14.6
1211	Kansas (bituminous coal).....	6	3	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	

See footnotes at end of table.

TABLE 2. General Statistics by Industries and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry ¹ and Geographic Area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added in mining (million dollars)
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	Geographic Area--Con.													
	SOUTH ATLANTIC DIVISION													
12	Bituminous coal and lignite mining, total.....	1,632	390	50.3	368.0	45.1	85.8	318.1	760.4	489.6	1,119.0	(D)	53.5	608.6
1211	Bituminous coal.....	1,585	382	49.6	362.1	44.4	84.3	312.5	748.1	483.4	1,102.1	(D)	53.1	602.8
1213	Bituminous and lignite mining services, n.e.c.....	47	8	0.8	5.9	0.7	1.5	5.6	12.3	6.2	16.9	1.5	0.4	5.8
1211	Maryland (bituminous coal).....	39	5	0.3	1.7	0.3	0.5	1.6	3.9	2.0	5.6	0.4	0.4	3.7
	Virginia:													
12	Bituminous coal and lignite mining, total.....	577	99	9.5	57.8	8.5	15.2	49.2	131.6	89.3	197.5	23.4	11.5	98.1
1211	Bituminous coal.....	570	97	9.4	57.1	8.4	15.1	48.5	128.7	88.1	194.0	22.9	11.3	95.6
1213	Bituminous and lignite mining, services.....	7	2	0.1	0.7	0.1	0.1	0.6	2.9	1.1	3.5	0.5	0.2	2.5
	West Virginia:													
12	Bituminous coal and lignite mining, total.....	1,014	286	40.6	308.4	36.3	70.1	267.3	624.8	398.4	916.0	(D)	41.6	506.8
1211	Bituminous coal.....	976	280	39.9	303.3	35.7	68.7	262.4	615.5	393.3	902.6	(D)	41.3	503.4
1213	Bituminous and lignite mining services, n.e.c.....	38	6	0.7	5.1	0.6	1.4	4.9	9.3	5.1	13.4	1.0	0.3	3.3
	EAST SOUTH CENTRAL DIVISION													
12	Bituminous coal and lignite mining, total.....	1,033	243	25.5	169.4	24.0	43.3	146.0	409.4	257.2	582.5	(D)	28.4	308.9
1211	Bituminous coal.....	1,023	242	25.4	169.0	23.1	43.2	145.6	408.8	256.9	581.5	(D)	28.2	307.2
1213	Bituminous and lignite mining services, n.e.c.....	10	1	0.1	0.4	0.1	0.1	0.4	0.7	0.4	1.0	0.1	0.1	1.7
	Kentucky:													
12	Bituminous coal and lignite mining, total.....	765	173	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	20.8	219.8
1211	Bituminous coal.....	761	173	18.8	125.1	17.1	32.1	107.7	291.8	199.8	428.8	62.8	20.7	219.3
	Tennessee:													
12	Bituminous coal and lignite mining.....	138	31	1.7	9.7	1.6	2.9	8.7	24.3	15.9	32.0	8.2	1.8	20.3
1211	Bituminous coal.....	137	31	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.8	20.1
	Alabama:													
12	Bituminous coal and lignite mining, total.....	129	39	5.0	34.6	4.5	8.3	29.7	93.3	41.5	121.6	13.3	5.7	68.7
1211	Bituminous coal.....	125	38	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	5.7	67.8
1213	Bituminous and lignite mining services, n.e.c.....	4	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.1	1.0
	WEST SOUTH CENTRAL DIVISION													
12	Bituminous coal and lignite mining.....	26	7	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.6	(NA)
1211	Bituminous coal.....	21	5	0.3	2.1	0.3	0.5	1.8	5.2	2.3	6.6	1.0	0.5	5.5
1211	Arkansas (bituminous coal).....	11	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.1	1.3
1211	Oklahoma (bituminous coal).....	10	3	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	4.2
	MOUNTAIN DIVISION													
12	Bituminous coal and lignite mining.....	148	39	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	22.1	19.5
1211	Bituminous coal.....	136	34	3.3	24.4	2.8	5.1	19.7	71.2	40.7	105.2	6.7	21.5	19.0
	Wyoming:													
12	Bituminous coal and lignite mining, total.....	17	8	0.4	2.6	0.3	0.6	2.3	9.8	3.7	12.9	0.5	0.4	7.3
1211	Bituminous coal.....	16	7	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.3	6.2
1213	Bituminous and lignite mining services, n.e.c.....	1	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.1	1.1
1211	Colorado (bituminous coal).....	67	12	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.4	19.5
1211	Utah (bituminous coal).....	30	12	1.3	9.7	1.1	1.8	7.3	23.7	26.2	48.2	1.7	1.7	23.3

See footnotes at end of table.

TABLE 2. General Statistics by Industries and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry ¹ and Geographic Area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures	All employ- ees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man- hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	Geographic Area--Con. PACIFIC DIVISION													
12	Bituminous coal and lignite mining.....	16	4	0.3	2.9	0.2	0.5	2.5	5.5	3.3	7.1	1.6	0.4	6.2
1211	Bituminous coal.....	11	3	0.2	2.0	0.1	0.3	1.6	4.2	2.6	5.2	1.5	0.4	6.2

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (Z) Less than \$50 thousand or 50 employees.

¹Industries and industry groups with less than 50 employees are omitted. They are included, however, in higher level totals. For industries and industry groups with 50 or more employees which cannot be shown because they would disclose figures for individual companies, the number of establishments is shown and the employment size range is indicated by one of the following symbols:

BB - 50-99 employees
CC - 100-249 employees

EE - 250-499 employees
FF - 500-999 employees

GG - 1,000-2,499 employees
HH - 2,500 and over employees

²Includes data for employees of central office and related facilities for the Anthracite Industry in New York.

TABLE 3. Selected Statistics for Industry Groups, by Type of Operation and Geographic Areas: 1967

(See appendix, Explanation of Terms)

Code	Industry group ^a and geographic area	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
UNITED STATES														
	Establishments.....number..	4,484	4,455	3,103	2,807	218	78	934	521	275	138	157	261	29
	Employees.....1,000..	131.6	131.5	34.8	29.3	4.0	1.5	86.3	65.7	12.4	8.2	2.7	7.7	0.2
	Value added in mining..mil.dol..	2091.3	2090.5	427.1	319.3	78.9	28.9	1587.0	1066.4	355.3	164.9	47.2	29.4	0.8
1111	Anthracite:													
	Establishments.....number..	371	367	282	248	23	11	33	11	10	12	47	5	4
	Employees.....1,000..	6.4	6.4	2.7	1.7	1.0	0.1	2.6	1.3	0.6	0.7	0.8	0.3	(Z)
	Value added in mining..mil.dol..	74.7	74.7	34.1	16.1	16.4	1.6	32.0	12.7	7.4	12.0	8.5	-	(Z)
1112	Anthracite mining services:													
	Establishments.....number..	32	32	-	-	-	-	-	-	-	-	-	32	-
	Employees.....1,000..	0.8	0.8	-	-	-	-	-	-	-	-	-	0.8	-
	Value added in mining..mil.dol..	7.4	7.4	-	-	-	-	-	-	-	-	-	7.4	-
1211	Bituminous coal:													
	Establishments.....number..	3,921	3,896	2,793	2,559	167	67	884	510	248	126	110	109	25
	Employees.....1,000..	122.5	122.4	32.0	27.6	2.9	1.4	83.3	64.4	11.4	7.5	1.9	5.2	0.2
	Value added in mining..mil.dol..	1974.6	1973.8	392.5	303.2	62.0	27.3	1542.6	1053.7	336.0	152.9	38.7	-	0.8
1212	Lignite:													
	Establishments.....number..	45	45	28	-	28	-	17	-	17	-	-	-	-
	Employees.....1,000..	0.5	0.5	0.1	-	0.1	-	0.4	-	0.4	-	-	-	-
	Value added in mining..mil.dol..	12.9	12.9	0.5	-	0.5	-	12.4	-	12.4	-	-	-	-
1213	Bituminous and lignite mining services, n.e.c.:													
	Establishments.....number..	115	115	-	-	-	-	-	-	-	-	-	115	-
	Employees.....1,000..	1.4	1.4	-	-	-	-	-	-	-	-	-	1.4	-
	Value added in mining..mil.dol..	21.7	21.7	-	-	-	-	-	-	-	-	-	21.7	-
NORTHEAST REGION (PENNSYLVANIA)														
	Establishments.....number..	1,150	1,141	763	654	91	18	210	104	70	36	71	97	9
	Employees.....1,000..	30.3	30.3	9.3	7.2	2.0	0.2	16.9	13.1	2.2	1.6	1.4	2.8	(Z)
	Value added in mining..mil.dol..	414.3	414.0	122.8	87.6	32.5	2.5	260.5	0.9	32.4	29.2	18.8	11.9	0.3
111	Anthracite:													
	Establishments.....number..	403	399	282	248	23	11	33	11	10	12	47	37	4
	Employees.....1,000..	7.2	7.2	2.7	1.7	1.0	0.1	2.6	1.3	0.6	0.7	0.8	1.1	(Z)
	Value added in mining..mil.dol..	82.1	82.1	34.4	16.1	16.4	1.6	32.0	12.7	7.4	12.0	8.2	7.4	(Z)
121	Bituminous coal:													
	Establishments.....number..	747	742	481	406	68	7	177	93	60	24	24	60	5
	Employees.....1,000..	23.1	23.1	6.6	5.6	1.0	0.1	14.3	11.8	1.6	0.9	0.6	1.7	(Z)
	Value added in mining..mil.dol..	332.2	332.0	88.4	71.5	16.1	0.9	228.5	186.2	25.0	17.2	10.6	4.5	0.3
EAST NORTH CENTRAL DIVISION														
	Establishments.....number..	398	396	191	147	36	8	159	49	90	20	6	40	2
	Employees.....1,000..	(D)	(D)	3.0	(D)	0.8	(D)	14.7	(D)	(D)	(D)	(D)	1.4	(D)
	Value added in mining..mil.dol..	(D)	(D)	53.3	(D)	22.4	(D)	332.3	(D)	(D)	(D)	(D)	2.3	(D)
Ohio:														
	Establishments.....number..	264	264	151	109	34	8	82	19	45	18	5	26	-
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.7	1.4	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	39.3	25.1	(D)	(D)	(D)	-
Indiana:														
	Establishments.....number..	52	52	26	25	1	-	22	4	18	-	-	4	-
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-
Illinois:														
	Establishments.....number..	82	80	14	13	1	-	55	26	27	2	1	10	2
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	-	8.0	(D)	3.1	(D)	(D)	0.4	(D)
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	(D)	-	188.8	(D)	101.8	(D)	(D)	(Z)	(D)
WEST NORTH CENTRAL DIVISION (Bituminous Coal Only)														
	Establishments.....number..	83	83	44	22	22	-	33	4	29	-	-	6	-
	Employees.....1,000..	(D)	(D)	0.1	0.1	(Z)	-	1.0	0.1	0.9	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	1.1	0.6	0.5	-	23.9	1.2	22.7	-	-	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups, by Type of Operation and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
WEST NORTH CENTRAL DIVISION--Con.														
Missouri:														
	Establishments.....number..	22	22	13	11	2	-	5	-	5	-	-	4	-
	Employees.....1,000..	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	-	-	(D)	-
Kansas:														
	Establishments.....number..	6	6	1	1	-	-	4	-	4	-	-	1	-
	Employees.....1,000..	(D)	(D)	(D)	(D)	-	-	0.2	-	0.2	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	-	-	4.4	-	4.4	-	-	(D)	-
SOUTH ATLANTIC DIVISION														
	Establishments.....number..	1,631	1,616	1,204	1,142	31	31	283	221	20	42	46	83	15
	Employees.....1,000..	50.3	50.2	13.3	12.2	0.5	0.6	34.2	29.1	0.5	4.6	0.8	1.9	0.1
	Value added in mining..mil.dol..	754.9	754.7	145.8	126.7	8.6	10.5	579.1	494.7	9.3	75.1	17.5	12.3	0.2
Maryland:														
	Establishments.....number..	40	39	31	26	5	-	5	2	2	1	2	1	1
	Employees.....1,000..	0.3	(D)	(D)	(D)	0.1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	4.0	(D)	(D)	(D)	0.9	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia:														
	Establishments.....number..	577	573	480	461	5	14	60	46	3	11	16	17	4
	Employees.....1,000..	9.5	(D)	4.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	131.6	(D)	41.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
West Virginia:														
	Establishments.....number..	1,014	1,004	693	655	21	17	218	173	15	30	28	65	10
	Employees.....1,000..	(D)	(D)	8.8	8.0	(D)	(D)	29.7	(D)	0.4	(D)	(D)	1.4	0.1
	Value added in mining..mil.dol..	(D)	(D)	107.7	93.4	(D)	(D)	495.0	(D)	6.9	(D)	(D)	9.4	0.1
EAST SOUTH CENTRAL DIVISION														
	Establishments.....number..	1,033	1,031	805	756	29	20	176	104	42	30	33	17	2
	Employees.....1,000..	25.5	(D)	8.6	7.7	0.7	0.2	16.1	12.5	(D)	(D)	0.4	(D)	(D)
	Value added in mining..mil.dol..	409.4	(D)	97.6	77.5	14.5	5.7	303.1	186.4	(D)	(D)	8.2	(D)	(D)
Kentucky:														
	Establishments.....number..	765	763	606	581	9	16	121	73	23	25	27	9	2
	Employees.....1,000..	18.8	(D)	6.8	6.3	0.3	0.2	11.3	(D)	(D)	(D)	0.4	(D)	(D)
	Value added in mining..mil.dol..	292.1	(D)	84.3	62.8	16.4	5.1	200.4	(D)	(D)	(D)	7.3	(D)	(D)
Tennessee:														
	Establishments.....number..	138	138	106	98	5	3	26	18	8	-	4	2	-
	Employees.....1,000..	1.7	1.7	0.9	(D)	(D)	(D)	0.7	(D)	(D)	-	(D)	(D)	-
	Value added in mining..mil.dol..	24.3	24.3	12.2	(D)	(D)	(D)	11.8	(D)	(D)	-	(D)	(D)	-
Alabama:														
	Establishments.....number..	129	129	93	76	16	1	28	11	10	7	2	6	-
	Employees.....1,000..	5.0	5.0	0.8	(D)	(D)	(D)	4.0	(D)	0.4	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	93.3	93.3	11.1	(D)	(D)	(D)	80.9	(D)	10.4	(D)	(D)	(D)	-
WEST SOUTH CENTRAL DIVISION (Bituminous coal only)														
	Establishments.....number..	26	26	15	13	2	-	10	1	8	1	-	1	-
	Employees.....1,000..	(D)	(D)	0.1	(D)	(D)	-	(D)	(D)	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	0.7	(D)	(D)	-	(D)	(D)	(D)	(D)	-	(D)	-
Oklahoma:														
	Establishments.....number..	10	10	6	6	-	-	4	-	3	1	-	-	-
	Employees.....1,000..	0.2	0.2	(D)	(D)	-	-	(D)	-	(D)	(D)	-	-	-
	Value added in mining..mil.dol..	3.9	3.9	(D)	(D)	-	-	(D)	-	(D)	(D)	-	-	-
MOUNTAIN DIVISION (Bituminous coal only)														
	Establishments.....number..	148	147	73	69	4	-	59	42	16	1	2	13	1
	Employees.....1,000..	(D)	(D)	(D)	0.1	(Z)	-	3.0	2.5	(D)	(D)	(D)	0.6	(D)
	Value added in mining..mil.dol..	(D)	(D)	(D)	1.3	(Z)	-	69.7	49.4	(D)	(D)	(D)	3.9	(D)

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups, by Type of Operation and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Under-ground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Under-ground mines	Open-pit mines	Combination methods and other methods			
	MOUNTAIN DIVISION--Con.													
	Wyoming:													
	Establishments.....number..	17	17	7	7	-	-	9	2	7	-	-	1	-
	Employees.....1,000..	0.4	0.4	(D)	(D)	-	-	0.2	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	9.8	9.8	(D)	(D)	-	-	8.3	(D)	(D)	-	-	(D)	-
	Colorado:													
	Establishments.....number..	70	69	37	37	-	-	26	20	5	1	-	6	1
	Employees.....1,000..	1.5	(D)	(Z)	(Z)	-	-	1.2	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	28.5	(D)	0.5	0.5	-	-	26.6	(D)	(D)	(D)	-	(D)	(D)
	Utah:													
	Establishments.....number..	31	31	9	9	-	-	17	17	-	-	1	4	-
	Employees.....1,000..	1.4	1.4	(D)	(D)	-	-	1.2	1.2	-	-	(D)	0.2	-
	Value added in mining..mil.dol..	24.1	24.1	(D)	(D)	-	-	23.0	23.0	-	-	(D)	0.4	-
	PACIFIC DIVISION													
	(Bituminous coal only)													
	Establishments.....number..	16	15	7	5	2	-	4	2	2	-	1	3	1
	Employees.....1,000..	0.3	(D)	(Z)	(D)	(D)	-	0.2	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining..mil.dol..	5.5	(D)	0.1	(D)	(D)	-	4.1	(D)	(D)	-	(D)	(D)	(D)
	Alaska:													
	Establishments.....number..	5	5	1	1	-	-	2	-	2	-	1	1	-
	Employees.....1,000..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.
 (Z) Less than one-half of the unit of measure specified. (X) Not applicable.

¹Includes data for central administrative offices and auxiliary units in addition to plants where it was not possible to classify the plant based on the information available.

TABLE 4. Detailed Statistics: 1967

Item	Coal mining industries total	11-Anthracite mining			12-Bituminous coal and lignite mining			
		Total	Industry 1111--Anthracite	Industry 1112--Mining services	Total	Industry 1211--Bituminous coal	Industry 1212--Lignite	Industry 1213--Bituminous coal and lignite mining services
Establishments, total.....number..	4,484	403	371	32	4,081	3,921	45	115
With 1 to 19 employees.....do....	3,360	334	313	21	3,026	2,891	38	97
With 20 employees or more.....do....	1,124	69	58	11	1,055	1,030	7	18
All employees (average for the year).....1,000..	131.5	7.2	6.4	0.8	124.4	122.5	0.5	1.4
Payroll (all employees), total for year..million dollars..	967.3	41.1	36.6	4.5	926.2	912.5	3.3	10.4
Production, development, and exploration workers:								
Average for the year.....1,000..	115.1	6.3	5.5	0.7	108.9	107.2	0.4	1.3
March.....do....	115.7	6.4	5.7	0.7	109.3	107.7	0.4	1.2
May.....do....	115.0	6.2	5.5	0.7	108.8	107.1	0.4	1.3
August.....do....	115.1	6.2	5.5	0.7	108.9	107.1	0.4	1.4
November.....do....	114.6	6.1	5.4	0.7	108.5	106.7	0.4	1.4
Man-hours.....millions..	224.0	11.6	10.3	1.3	212.4	208.8	0.8	2.8
January-March.....do....	57.4	3.0	2.7	0.3	54.4	53.5	0.2	0.7
April-June.....do....	55.8	2.9	2.6	0.3	52.9	52.0	0.2	0.7
July-September.....do....	54.2	2.8	2.5	0.3	51.4	50.5	0.2	0.7
October-December.....do....	56.4	2.8	2.5	0.3	53.6	52.7	0.2	0.7
Wages.....million dollars..	811.8	35.0	30.9	4.1	776.8	764.7	2.6	9.5
Supplemental labor cost not included in payroll.....do....	166.7	4.6	4.3	0.3	162.1	160.5	0.6	1.0
Legally required expenditures, including Social Security contributions.....do....	64.6	2.9	2.7	0.2	61.7	60.6	0.2	0.9
Payments for voluntary program.....do....	102.2	1.7	1.6	0.1	100.5	99.9	0.4	0.2
Cost of supplies, etc., total.....do....	1,350.0	80.2	76.3	3.9	1,269.7	1,252.4	6.5	10.9
Supplies used, minerals received for preparation, and purchased machinery.....do....	1,123.6	67.3	64.3	3.0	1,056.3	1,041.6	5.6	9.1
Cost of resales.....do....	12.4	0.4	0.4	(Z)	12.0	12.0	(Z)	(Z)
Purchased fuels consumed.....do....	28.4	2.3	1.8	0.5	26.1	24.8	0.3	1.0
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	5,790.6	244.5	235.3	9.2	5,546.1	5,520.7	20.1	5.3
Cost.....million dollars..	69.6	4.0	3.8	0.2	65.6	65.1	0.4	0.1
Generated less sold.....million kw.-hrs..	(NA)	66.9	66.9	-	(NA)	(NA)	-	(Z)
Contract work.....million dollars..	115.9	6.3	6.1	0.2	109.6	108.9	0.1	0.6
Value of shipments and receipts (including resales), total.....do....	3,100.6	155.9	146.0	9.9	2,944.7	2,897.5	17.9	29.3
Value of resales.....do....	15.0	0.5	0.5	(Z)	14.5	14.4	-	0.1
Value added in mining.....do....	2,091.3	82.1	74.7	7.4	2,009.2	1,974.6	12.9	21.7
Capital expenditures (except land and mineral rights), total.....do....	340.7	6.4	5.0	1.4	334.3	329.5	1.5	3.3
Mineral development and exploration.....do....	20.7	0.4	0.4	(Z)	20.3	20.3	(Z)	(Z)
New structures and additions.....do....	72.1	0.5	0.5	(Z)	71.6	71.4	0.1	0.1
New machinery and equipment.....do....	223.7	4.7	3.5	1.2	219.0	214.7	1.3	3.0
Used plant and equipment.....do....	24.1	0.7	0.5	0.2	23.4	23.1	0.1	0.2
Gross book value of fixed assets, total.....do....	3,489.2	169.9	159.8	10.1	3,319.3	3,267.3	32.3	19.7
Mineral properties.....do....	441.9	52.3	52.3	-	389.6	386.3	3.3	-
Building and other structures (excluding land).....do....	683.3	35.8	35.5	0.3	647.5	643.0	3.7	0.8
Machinery and equipment.....do....	2,364.0	81.9	72.0	9.9	2,282.1	2,237.9	25.3	18.9
Mineral development and exploration expenditures, total.....do....	36.9	0.6	0.6	-	36.3	36.2	0.1	(X)
Capitalized.....do....	22.4	0.4	0.4	-	22.0	22.0	(Z)	(X)
Expensed.....do....	14.4	0.2	0.2	-	14.2	14.2	(Z)	(X)
Mineral rights and geological expenditures.....do....	50.4	0.5	0.5	-	49.9	49.5	0.4	(Z)
Lease and land acquisition of nonproducing acreage.....do....	30.7	0.1	0.1	-	30.6	30.3	0.3	-
Geological and geophysical.....do....	0.8	(Z)	(Z)	-	0.8	0.8	(Z)	(Z)
Lease rents.....do....	18.8	0.3	0.3	-	18.5	18.4	0.1	-
Man-hours worked by production, development, and exploration workers, total.....millions..	(1)	(1)	10.3	(1)	(1)	208.8	0.8	(1)
At mines, total.....do....	(1)	(1)	7.8	(1)	(1)	185.0	0.7	(1)
Underground.....do....	(1)	(1)	4.4	(1)	(1)	139.2	-	(1)
Open-pit.....do....	(1)	(1)	3.0	(1)	(1)	27.2	0.6	(1)
Surface (including mine shops and yards).....do....	(1)	(1)	0.4	(1)	(1)	18.6	0.1	(1)
At preparation plants.....do....	(1)	(1)	2.5	(1)	(1)	23.8	0.2	(1)
Man-hours spent on exploration and development (included above).....do....	(1)	(1)	0.8	(1)	(1)	3.3	-	(1)

See footnotes on the next page.

TABLE 4. Detailed Statistics: 1967-Continued

Footnotes for table 4 major group 11 and 12.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.
 (Z) Less than \$50 thousand or 50 employees.
 *Man-hours for the Anthracite Service Industry and the Bituminous Coal and Lignite Mining Services Industry are represented by the following:

Item	Coal mining services industries			
	Anthracite	Bituminous coal and lignite		
	United States	United States	Middle Atlantic (Pennsylvania)	South Atlantic
Man-hours worked by production, development, and exploration workers, total.....millions..	1.3	2.8	0.7	1.5
Exploration work, including geophysical and other exploratory surveying.....do....	(Z)	0.1	(Z)	0.1
Stripping overburden.....do....	0.2	0.1	(Z)	(Z)
Mining minerals not for your own account.....do....	1.0	1.1	0.4	0.6
Other work.....do....	0.1	1.5	0.2	0.9

1967 CENSUS OF Mineral Industries



MI C67(1)-11A

INDUSTRY SERIES

ANTHRACITE MINING

SIC code	Industry
1111	Anthracite
1112	Anthracite mining services

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	5
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	6
3 Detailed Statistics, by Selected Types of Operations: 1967	7
4 General Statistics, by Employment Size of Establishment: 1967	8
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	9
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	9
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	10
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

ANTHRACITE MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in SIC Major Group 11, Anthracite Mining. This major group covers establishments primarily engaged in producing anthracite (hard coal). The separate industries included in this group are as follows:

SIC Code and Title

1111--Anthracite

1112--Anthracite Mining Services

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1111--Anthracite. This industry represents establishments primarily engaged in producing anthracite (hard coal) or in developing anthracite mines. All establishments in the United States that are classified in this industry are in Pennsylvania. This industry includes underground mines, stripping or culm bank operations by owners, dredge operations, and coal preparation plants (breakers, washeries, and screening plants) whether or not operated in conjunction with the mines served.

Industry 1112--Anthracite Mining Services. This industry represents establishments primarily engaged in performing for others, on a contract, fee, or other basis, anthracite mining services, such as the removal of overburden, strip mining for fresh or culm bank anthracite, drilling, mine tunneling, shaft sinking, and pumping or draining mines.

The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.

SUMMARY OF FINDINGS

The combined value of shipments and receipts of the industries in Major Group 11 amounted to \$156 million. Of this total, the Anthracite Industry had shipments of \$146 million, including \$45 million for raw coal sold or transferred to other establishments in the industry for preparation and \$0.5 million for shipments of coal purchased and resold without further processing, or net shipments of \$100 million. The Anthracite Mining Services Industry, with receipts of \$10 million, accounted for the remainder.

Net shipments of anthracite amounted to 12 million tons. An additional 6 thousand tons of anthracite were mined and used at the same establishment for power or heat.

Net production, Net shipment, and transfers for preparation. The figures for "net shipments" represent all prepared anthracite for shipment, sale, or employee use, including coal for stock, reported by breaker, washery, and dredge operators, plus raw anthracite sold for use without preparation. The new shipments figures exclude coal used at the producing mine or preparation plant for power or heat. They also exclude the raw coal

sold or transferred to other establishments for preparation, thus eliminating the duplication in "total" shipments which results from inclusion of the value of both the raw coal sold or transferred for preparation and the clean coal recovered therefrom. For individual counties, the net shipments figures include the prepared coal recovered from raw coal mined in other counties.

"Net production," on the other hand, represents the net tonnage of anthracite mined, excluding breaker, washery, and other refuse, based on the location of the mining operation. For individual counties the figures represent the net usable product from mines, culm banks, and dredges located within the boundaries of the designated area. At the mine level, the net production includes the tonnage of coal mined and prepared at the same establishment, coal used at the establishment for power or heat, the prepared or sized coal equivalent of raw coal mined for preparation at other establishments, and any raw coal sold for use without preparation.

Approximately 93 percent of all anthracite mined is prepared prior to use. The coal beds in the anthracite region are, in general, steeply pitching, and much folded and faulted. Steep-pitch mining makes it necessary to bring to the surface all material which is mined, including large quantities of slate and other refuse. About 18 million tons of raw coal were processed at preparation plants. Of this quantity, 7 million tons of raw coal were mined and prepared at the same establishment.

ANTHRACITE MINING SERVICES INDUSTRY

Establishments classified in the Anthracite Mining Services Industry were required to submit a separate report for each State in which mining services were performed. These reports were classified on the basis of the principal type of services performed and the principal industry served to determine their industry or subindustry classification. Each report included data on the amount received for services, the number of employees in March, the tonnage of raw anthracite mined, and capital expenditures, by county. For county statistics, all other figures in each report were allocated on the basis of these reported data.

The figures in this report for the Anthracite Mining Services Industry cover, except for hauling, all types of service activities which represent an integral part of anthracite mining operations.

Secondary production. The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries. However, secondary products and services in the Anthracite Industry amounted to less than 2 percent of the total value of shipments for the industry. All anthracite was produced in the Anthracite Industry, none being produced as a secondary product in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

Some differences occur in the similar statistics prepared by the two agencies, arising principally from differences in methods followed and objectives sought. Some of the comparable product statistics of the two agencies are shown on page 11A-4. The reasons for such differences, to the extent that they pertain to statistics for the anthracite mining industries, are summarized below:

1. The Bureau of the Census excludes establishments without paid employees. The Bureau of Mines includes all establishments regardless of size. However, the contribution to product of such establishments is usually small.
2. The Bureau of Mines statistics on both production and shipments are based primarily on data reported by breakers, washeries, and dredges, but also include coal sold for use without preparation. The quantity and value of the coal so reported is then distributed among the counties from which the coal originated. Census Bureau statistics are based on an establishment basis and take into account the actual location and type of product of the establishment as reported by the respondent, making a distinction between "net production" and "net shipments." The Bureau of Mines statistics therefore are comparable by State and county only with the census statistics for "net production" and are not comparable with the census county figures for "net shipments."
3. Both agencies collect information on raw coal shipped for preparation as well as on the prepared product from such coal. Also, both agencies collect information on raw coal shipped to public utility, manufacturing, and other industrial plants. While such statistics are published separately by the Bureau of the Census, the Bureau of Mines publishes only the final product and includes the raw coal shipped for use outside the anthracite industry in its figures for breaker, washery, and dredge product.
4. Differences exist in establishment coverage in certain areas for both collection agencies.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Item	Bureau of the Census statistics			Bureau of Mines statistics		
	Net pro- duction	Net shipments including inter- plant transfers		Net pro- duction	Net shipments	
		Quantity	Value		Quantity	Value
	(million short tons)	(million short tons)	(million dollars)	(million short tons)	(million short tons)	(million dollars)
United States, total.....	11.8	¹ 12.4	¹ 100.0	12.3	12.1	95.9
Selected Counties (Pennsylvania):						
Lackawanna.....	(NA)	(NA)	(NA)	0.5	0.5	3.6
Luzerne.....	(NA)	(NA)	(NA)	4.3	4.1	36.8
Northumberland.....	(NA)	(NA)	(NA)	1.5	1.5	9.5
Schuylkill.....	(NA)	(NA)	(NA)	4.2	4.2	34.9
Method of mining:						
Strip pit.....	(NA)	(NA)	(NA)	4.7	(NA)	(NA)
Underground.....	(NA)	(NA)	(NA)	3.3	(NA)	(NA)
Culm bank.....	(NA)	(NA)	(NA)	3.6	(NA)	(NA)
Dredge.....	(NA)	(NA)	(NA)	0.6	(NA)	(NA)

(NA) Not available.

¹Represents raw coal shipped for use without preparation plus prepared coal.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net shipments and receipts	Net production of anthracite ¹	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies, fuels, and purchased electric energy	Minerals received for treatment or agglomeration	Contract work	Purchased machinery installed				
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000 short tons)	(million dollars)
GROUP 11.--ANTHRACITE MINING																	
1967 ² ..	(NA)	403	69	7.2	41.1	6.2	11.6	35.0	82.1	27.7	43.7	6.3	3.0	155.9	111.7	11,844.8	6.4
1963...	1,025	1,069	102	11.8	58.8	10.3	19.5	49.9	120.5	35.9	63.9	22.2	9.1	236.5	172.1	18,388	15.1
1958...	1,157	1,248	159	22.8	93.4	20.0	30.9	79.4	164.5	41.3	85.4	40.5	10.0	325.1	234.0	22,258	16.6
1954...	1,296	1,436	245	37.5	135.9	33.0	48.3	113.9	196.8	41.7	119.8	51.2	9.3	408.4	291.4	29,225	10.5
1939...	359	³ 518	(NA)	88.6	120.1	83.1	124.5	107.8	154.0	35.9	(NA)	11.2	(NA)	(NA)	201.1	51,865	(NA)
1935 ⁴ ..	(NA)	(NA)	(NA)	99.3	134.8	92.4	(NA)	120.1	(NA)	38.5	(NA)	(NA)	(NA)	(NA)	(NA)	52,159	(NA)
INDUSTRY 1111.--ANTHRACITE																	
1967 ² ..	(NA)	371	58	6.4	36.6	5.5	10.3	30.9	74.7	24.8	43.7	6.1	2.2	146.0	102.0	11,844.8	5.0
1963...	987	1,026	85	10.7	53.0	9.3	17.8	44.9	110.5	31.0	63.9	21.3	6.8	221.0	156.5	18,388.0	12.7
1958...	1,075	1,163	117	19.7	79.5	17.3	26.4	67.4	142.2	29.9	84.5	39.3	6.3	290.3	199.2	22,258.0	12.8
1954...	1,160	1,291	186	32.8	118.1	26.8	42.1	98.7	167.1	30.7	119.8	50.2	5.7	365.5	248.5	29,255.0	7.9
1939...	289	³ 518	(NA)	85.7	115.9	80.4	120.1	104.4	146.4	32.2	(NA)	11.0	(NA)	(NA)	189.6	51,865.0	(NA)
1935 ⁴ ..	(NA)	350	(NA)	96.1	130.6	89.4	(NA)	116.4	174.7	35.7	(NA)	(NA)	(NA)	(NA)	210.4	52,159.0	(NA)
1929...	(NA)	198	(NA)	151.2	251.2	142.8	(NA)	230.0	320.8	57.3	(NA)	6.8	5.6	(NA)	384.9	74,546.0	(NA)
1919 ⁵ ..	(NA)	254	(NA)	154.7	223.3	147.4	(NA)	210.3	289.0	73.0	0.4	1.6	(NA)	364.1	363.7	88,171.0	(NA)
1909...	195	365	(NA)	173.8	96.9	169.5	(NA)	92.3	120.6	26.7	-	1.7	(NA)	149.0	149.0	80,987.0	(NA)
1902...	119	⁶ 369	(NA)	72.7	41.6	⁷ 69.7	(NA)	38.7	63.0	12.7	(NA)	0.4	(NA)	(NA)	76.2	41,374.0	(NA)
1889...	(NA)	³ 411	(NA)	124.2	39.3	122.4	(NA)	37.8	52.6	10.8	(NA)	2.3	(NA)	(NA)	65.7	45,545.0	(NA)
1880...	(NA)	275	(NA)	71.0	22.8	69.7	(NA)	(NA)	35.5	6.7	(NA)	(NA)	(NA)	(NA)	42.3	28,641.0	(NA)
1870...	(NA)	229	(NA)	53.0	23.0	(NA)	(NA)	(NA)	34.8	3.6	(NA)	(NA)	(NA)	(NA)	38.4	17,528.0	(NA)
1860...	(NA)	176	(NA)	25.1	5.5	(NA)	(NA)	(NA)	10.2	1.6	(NA)	(NA)	(NA)	(NA)	11.9	8,115.0	(NA)
1850...	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	5.3	4,138.0	(NA)
1840...	(NA)	(NA)	(NA)	3.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	¹ 963.0	(NA)
INDUSTRY 1112.--ANTHRACITE MINING SERVICES																	
1967 ² ..	(NA)	32	11	0.8	4.5	0.7	1.3	4.1	7.4	2.9	(X)	0.2	0.8	9.9	9.7	(⁸)	1.4
1963...	41	43	17	1.1	5.8	1.0	1.8	5.0	10.0	4.8	(X)	0.9	2.2	15.5	15.5	(⁸)	2.5
1958...	84	85	42	3.1	13.9	2.8	4.5	12.0	22.3	11.4	(X)	1.2	3.7	34.8	34.8	(⁸)	3.8
1954...	144	145	59	4.7	17.9	4.2	6.2	15.3	29.7	11.1	(X)	1.1	3.6	42.9	42.9	(⁸)	2.6
1939...	71	(NA)	(NA)	2.9	4.2	2.7	4.4	3.4	7.6	3.7	(X)	0.1	(NA)	11.5	11.5	(⁸)	1.0
1935 ⁹ ..	(NA)	(NA)	(NA)	3.3	4.2	3.1	(NA)	3.7	(NA)	2.8	(X)	(NA)	(NA)	(NA)	(NA)	(⁸)	(NA)
1902 ¹⁰ ..	(NA)	(NA)	(NA)	1.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	0.4	0.4	(⁸)	(NA)

Note: Detailed figures may not add to totals because of rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents the clean coal equivalent of all coal mined, including coal produced and used at the same establishment for power or heat.²In 1967, for the first time data for single establishments without paid employees were excluded from the Census. In 1963, there were 498 establishments without paid employees in the anthracite industry; however, they accounted for less than 5 percent of this industry's value added. There were 2 establishments without paid employees in the anthracite service industry in 1963; however, they accounted for less than 1 percent of this industry's value added.³Represents number mines, culm banks, and dredges.⁴Represents anthracite (producing operators only) and anthracite stripping services. Data are not available for anthracite services other than stripping.⁵Represents producing operations only.⁶Represents number of preparation plants and dredges.⁷Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.⁸Coal mined by the Anthracite Mining Services Industry is included in the production shown for the Anthracite Industry.⁹Represents anthracite stripping services only.¹⁰Represents number of employees engaged in all contract work and payments for all contract work as reported by companies operating anthracite mines.

TABLE 2. General Statistics by Geographic Area and Type of of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments ¹		All employees ¹		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees ¹	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1111.--ANTHRACITE													
United States (Pennsylvania), total	371	58	6.4	36.6	5.5	10.3	30.9	74.7	76.4	146.0	5.0	10.7	110.5
County													
Carbon.....	5	1	0.2	1.0	0.2	0.3	0.9	1.9	1.2	3.0	0.1	² 0.3	² 3.4
Columbia.....	10	1	0.1	0.3	0.1	0.1	0.3	0.9	0.4	1.1	0.3	² 0.2	² 1.8
Dauphin.....	10	2	0.1	0.3	0.1	0.1	0.3	1.1	1.5	2.4	0.1	0.1	1.4
Lackawanna.....	25	6	0.3	1.6	0.3	0.6	1.5	5.9	4.6	9.4	1.1	0.9	7.7
Luzerne.....	47	16	2.9	17.6	2.4	4.4	14.4	30.6	22.4	52.5	0.5	4.1	42.2
Northumberland.....	68	5	0.5	2.5	0.5	0.9	2.2	6.4	8.6	14.3	0.7	1.1	11.8
Schuylkill.....	175	27	2.2	12.7	1.9	3.6	10.8	26.6	36.9	61.5	2.0	4.0	40.9
All other counties ³	31	-	0.1	0.5	0.1	0.2	0.4	1.2	0.8	1.9	0.2	0.2	2.1
Type of Operation													
Producing establishments, total.....	⁴ 367	⁴ 58	⁴ 6.4	⁴ 36.6	⁵ 5.5	⁵ 10.3	⁵ 30.9	⁵ 74.7	⁵ 76.4	⁵ 146.0	⁵ 5.0	10.7	110.5
Mines only, total.....	282	27	2.7	14.8	2.5	4.5	13.1	34.1	18.6	49.4	3.4	4.1	42.9
Strip-pit.....	23	14	1.0	5.9	0.8	1.6	5.0	16.4	9.9	24.4	1.9	0.9	12.5
Underground.....	248	13	1.7	8.6	1.6	2.7	7.8	16.1	8.4	23.1	1.4	2.5	23.0
Combination.....	11	-	0.1	0.3	0.1	0.1	0.3	1.6	0.4	1.9	0.1	0.6	7.4
Mines with preparation plants, total.....	33	15	2.6	15.1	2.3	4.3	13.7	32.0	20.7	51.9	0.7	4.9	53.1
Strip-pit.....	10	5	0.6	3.4	0.6	1.0	3.0	7.4	5.4	12.5	0.3	0.7	9.6
Underground.....	11	3	1.3	7.3	1.1	2.1	6.8	12.7	4.9	17.5	0.1	0.7	3.7
Culm bank.....	9	4	0.2	1.2	0.2	0.4	1.0	4.8	2.3	6.9	0.2	0.4	5.1
Combination.....	3	3	0.5	3.2	0.4	0.8	2.8	7.2	8.0	15.1	0.1	3.1	34.8
Separately operated preparation plants, total.....	47	12	0.8	4.7	0.7	1.4	4.1	8.5	37.1	44.7	0.9	1.2	14.5
Mechanical cleaning.....	31	9	0.6	3.5	0.6	1.1	3.2	6.1	24.8	30.3	0.6	1.2	14.1
Mechanical crushing, screening and sizing only.....	16	3	0.2	1.2	0.2	0.3	0.9	2.4	12.2	14.3	0.3	(Z)	0.3
Nonproducing establishments.....	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(Z)	(⁶)
INDUSTRY 1112.--ANTHRACITE MINING SERVICES													
United States (Pennsylvania), total	⁷ 32	⁷ 11	0.8	4.5	0.7	1.3	4.1	7.4	3.9	9.9	1.4	1.1	10.0
County													
Luzerne.....	7	3	0.2	1.0	0.1	0.3	0.8	1.4	0.6	1.9	0.1	0.5	4.0
Schuylkill.....	8	5	0.3	1.7	0.3	0.6	1.6	2.7	1.2	3.5	0.4	0.3	2.4
All other counties.....	17	3	0.3	1.8	0.3	0.4	1.7	3.3	2.1	4.5	0.9	0.3	3.6

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Includes data for central offices and related facilities.²For 1963, includes data for establishments classified in the Anthracite Mining Services Industry.³Represents Berks, Lancaster, Lebanon, Snyder, Sullivan, and Wayne Counties.⁴Includes data for separately reported central offices and related facilities. These are not distributed by detailed types of operation.⁵Data for nonproducing establishments included in producing establishments.⁶For 1963, not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeds capital expenditures.⁷Service companies were permitted to prepare one report for all mining services performed. The totals shown for number of establishments in this table, and all figures shown for number of establishments in other tables of this report, are the counts of these reports. However, these reports contained data for the total receipts for services, total employment, and tonnage of raw coal mined by county. All other county information for these industries in this table was obtained by allocating the totals reported for each establishment on the basis of the reported county data. The number of establishments shown by county represents the number of operations in separate counties.

TABLE 3. Detailed Statistics, by Selected Types of Operation: 1967

Item	1111.-Anthracite industry										1112.-Anthracite mining services industry
	All types of operations	Producing mining operations only			Producing mining operations with preparation plant				Producing preparation plants only		
		All operations	Strip-pit	Under-ground	All operations	Strip-pit	Under-ground	Culm bank	All plants	Mechanical cleaning	
Establishments, total.....number..	371	282	23	248	33	10	11	9	47	31	32
With 1 to 19 employees.....do....	313	255	9	235	18	5	8	5	35	22	21
With 20 to 99 employees.....do....	47	23	11	13	9	2	2	4	12	9	10
With 100 employees or more.....do....	11	4	3	-	6	3	1	-	-	-	1
All employees (average for the year).....1,000..	16.4	2.7	1.0	1.7	2.6	0.6	1.3	0.2	0.8	0.6	0.8
Payroll (all employees), total for year..million dollars..	136.6	14.8	5.9	8.6	15.1	3.4	7.3	1.2	4.7	3.5	4.5
Production, development, and exploration workers:											
Average for the year.....1,000..	5.5	2.5	0.8	1.6	2.3	0.6	1.1	0.2	0.7	0.6	0.7
March.....do....	5.7	2.6	0.9	1.6	2.4	0.6	1.3	0.2	0.7	0.6	0.7
May.....do....	5.5	2.5	0.8	1.6	2.3	0.6	1.2	0.2	0.7	0.6	0.7
August.....do....	5.5	2.4	0.8	1.6	2.3	0.6	1.1	0.2	0.7	0.6	0.7
November.....do....	5.4	2.4	0.8	1.6	2.2	0.6	1.0	0.2	0.7	0.6	0.7
Man-hours.....millions..	10.3	4.5	1.6	2.7	4.3	1.0	2.1	0.4	1.4	1.1	1.3
January-March.....do....	2.7	1.2	0.4	0.7	1.1	0.2	0.6	0.1	0.4	0.3	0.3
April-June.....do....	2.6	1.1	0.4	0.7	1.1	0.2	0.5	0.1	0.3	0.3	0.3
July-September.....do....	2.5	1.1	0.4	0.7	1.1	0.3	0.5	0.1	0.4	0.3	0.3
October-December.....do....	2.5	1.1	0.4	0.7	1.1	0.3	0.5	0.1	0.4	0.3	0.3
Wages.....million dollars..	30.9	13.1	5.0	7.8	13.7	3.0	6.8	1.0	4.1	3.2	4.1
Supplemental labor cost not included in payroll.....do....	4.3	1.3	0.5	0.8	2.1	0.3	1.5	0.1	0.9	0.8	0.3
Legally required expenditures, including Social Security contributions.....do....	2.7	1.0	0.4	0.6	1.4	0.2	0.9	0.1	0.3	0.2	0.2
Payments for voluntary programs.....do....	1.6	0.3	0.1	0.1	0.8	0.1	0.6	-	0.6	0.6	0.1
Cost of supplies, etc., total.....do....	76.4	18.6	9.9	8.4	20.7	5.4	4.9	2.3	37.1	24.8	3.9
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	64.3	13.3	7.1	5.9	15.0	3.5	4.5	1.8	36.0	24.3	3.0
Cost of resales.....do....	0.4	(Z)	(Z)	(Z)	0.4	0.1	(Z)	(Z)	-	-	(Z)
Purchased fuels consumed.....do....	1.8	1.0	0.5	0.3	0.5	0.2	0.1	0.1	0.3	0.2	0.5
Electric energy:											
Purchased:											
Quantity.....million kw.-hrs..	235.3	79.1	39.4	28.2	119.6	25.2	31.9	11.9	36.6	14.8	9.2
Cost.....million dollars..	3.8	1.6	0.7	0.7	1.5	0.4	0.4	0.2	0.7	0.3	0.2
Generated less sold.....million kw.-hrs..	66.9	1.0	-	1.0	66.3	-	66.3	-	0.3	-	-
Contract work.....million dollars..	6.1	2.8	1.6	1.2	3.2	1.2	(Z)	0.2	0.1	(Z)	0.2
Value of shipments and receipts (including resales), total.....do....	146.0	49.4	24.4	23.1	51.9	12.5	17.5	6.9	44.7	30.3	9.9
Value of resales.....do....	0.5	0.1	(Z)	(Z)	0.4	0.1	(Z)	(Z)	-	-	(Z)
Value added in mining.....do....	74.7	34.1	16.4	16.1	32.0	7.4	12.7	4.8	8.5	6.1	7.4
Capital expenditures (except land and mineral rights), total.....do....	5.0	3.4	1.9	1.4	0.7	0.3	0.1	0.2	0.9	0.6	1.4
Mineral development and exploration.....do....	0.4	0.3	0.1	0.2	0.1	0.1	(Z)	-	(Z)	(Z)	(Z)
New structures and additions.....do....	0.5	0.1	(Z)	0.1	0.2	(Z)	(Z)	(Z)	0.2	0.1	(Z)
New machinery and equipment.....do....	3.5	2.4	1.5	1.0	0.4	0.2	0.1	0.1	0.6	0.4	1.2
Used plant and equipment.....do....	0.5	0.4	0.3	0.1	0.1	(Z)	(Z)	(Z)	(Z)	(Z)	0.2
Gross book value of fixed assets, total.....do....	159.8	48.9	26.0	21.7	80.6	10.4	62.6	3.0	29.8	19.8	10.1
Mineral properties.....do....	52.3	4.3	0.7	3.5	47.5	0.8	45.4	(Z)	0.4	0.2	-
Building and other structures (excluding land).....do....	35.5	3.2	0.9	2.4	19.4	1.3	15.4	1.0	12.8	9.2	0.3
Machinery and equipment.....do....	72.0	41.4	24.4	15.9	13.6	8.3	1.8	2.0	16.7	10.4	9.9
Mineral development and exploration expenditures, total.....do....	0.6	0.4	0.1	0.3	0.3	0.1	0.1	-	(Z)	(Z)	-
Capitalized.....do....	0.4	0.3	0.1	0.2	0.1	0.1	(Z)	-	(Z)	(Z)	-
Expensed.....do....	0.2	0.1	(Z)	0.1	(Z)	(Z)	(Z)	-	-	-	-
Mineral rights and geological expenditures.....do....	0.5	0.3	0.1	0.1	0.1	(Z)	(Z)	-	(Z)	(Z)	-
Lease and land acquisition of nonproducing acreage.....do....	0.1	0.1	-	-	(Z)	-	(Z)	-	(Z)	-	-
Geological and geophysical.....do....	(Z)	(Z)	-	-	-	-	-	-	-	-	-
Lease rents.....do....	0.3	0.2	0.1	0.1	0.1	(Z)	(Z)	-	(Z)	(Z)	-
Net shipments of primary product.....1,000 short tons..	100.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	9.9
Crude minerals mined during 1967, by ownership.....do....	11,844.8	5,984.8	2,957.8	2,556.0	4,665.7	1,178.4	1,526.1	871.4	-	-	-
Production for own account.....do....	5,682.4	2,696.8	1,326.2	1,091.6	2,959.7	409.4	1,316.3	631.4	-	-	-
Production for accounts of others.....do....	702.3	224.3	178.1	46.1	478.0	-	-	-	-	-	-
Royalty production.....do....	1,808.6	1,326.4	687.4	638.1	357.4	268.8	79.4	-	-	-	-
Royalties paid.....million dollars..	0.9	0.5	0.3	0.3	0.3	0.1	(Z)	0.1	-	-	-
Undistributed.....1,000 short tons..	3,651.6	1,737.3	766.1	780.2	870.6	500.2	130.3	240.0	-	-	-
Man-hours worked by production, development, and exploration workers, total.....millions..	10.3	4.1	1.4	3.0	4.3	1.0	2.1	0.4	1.4	1.1	(2)
At mines, total.....do....	7.8	4.1	1.4	3.0	3.2	0.7	1.9	0.2	-	-	(2)
Underground.....do....	4.4	2.1	-	2.6	1.7	-	1.8	-	-	-	(2)
Strip pit.....do....	3.0	1.7	1.3	0.3	1.3	0.7	(Z)	0.2	-	-	(2)
Surface (including mine shops and yards).....do....	0.4	0.2	0.1	0.1	0.2	(Z)	0.1	(Z)	-	-	(2)
At preparation plants.....do....	2.5	-	-	-	1.1	0.3	0.3	0.2	1.4	1.1	(2)
Man-hours spent on exploration and development (included above).....do....	0.8	0.2	0.1	0.1	0.6	0.2	(Z)	(Z)	-	-	(2)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1111.—Anthracite industry										1112.—Anthr- acite mining serv- ices indus- try
	All types of opera- tions	Producing mining operations only			Producing mining operations with preparation plant				Producing prepara- tion plants only		
		All operations	Strip- pit	Under- ground	All operations	Strip- pit	Under- ground	Culm bank	All plants	Mechan- ical cleaning	
Total coal mined, all types.....1,000 short tons..	11,844.8	5,984.8	2,957.8	2,556.0	4,665.7	1,178.4	1,526.1	871.4	-	-	-
Strip-pit:											
Mined by your own employees.....do....	4,983.7	2,639.1	2,607.1	-	1,793.5	966.6	-	-	-	-	-
Mined by outside contractor.....do....	612.1	350.7	350.7	-	261.4	211.7	-	-	-	-	-
Underground.....do....	4,082.1	2,556.0	-	2,556.0	1,526.1	-	1,526.1	-	-	-	-
Auger, culm bank, or dredge:											
Mined by your own employees.....do....	1,603.4	439.0	-	-	1,013.3	-	-	871.4	-	-	-
Mined by outside contractor.....do....	71.4	-	-	-	71.4	-	-	-	-	-	-
Undistributed.....1,000 short tons..	492.1	-	-	-	-	-	-	-	-	-	-

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than 50 thousand.

¹Includes figures for separately reported central offices and related facilities. These were not distributed by detailed types of operation.

²Service establishments were requested to report man-hours by kind of work performed, rather than by department. These man-hours were reported as follows: Exploration work, including geophysical and other exploratory surveying, (Z) million man-hours; stripping overburden, 0.2 million man-hours; mining minerals not for your own account, 1.0 million man-hours; and other work, 0.1 million man-hours.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1111	Anthracite:										
	Establishments, total.....	371	6.4	36.6	5.5	10.3	30.9	74.7	76.4	146.0	5.0
	Establishments with an average of-										
	0 to 4 employees.....	190	.3	1.5	.3	.6	1.5	5.5	4.6	9.3	.7
	5 to 9 employees.....	73	.5	2.2	.4	.8	2.0	4.7	7.1	11.1	.7
	10 to 19 employees.....	50	.6	3.4	.6	1.1	3.1	8.6	7.8	15.8	.7
	20 to 49 employees.....	35	1.1	6.3	1.0	1.8	5.4	16.0	22.4	36.5	1.8
	50 to 99 employees.....	12	.8	4.9	.6	1.1	3.5	7.2	17.4	24.1	.4
	100 to 249 employees.....	9	3.0	18.2	2.5	4.9	15.4	32.8	17.1	49.2	.6
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records.....	129	.2	.7	.2	.3	.7	2.5	2.5	4.5	.4
1112	Anthracite mining services:										
	Establishments, total.....	32	.8	4.5	.7	1.3	4.1	7.4	3.9	9.9	1.4
	Establishments with an average of-										
	0 to 4 employees.....	16	(Z)	.1	(Z)	.1	.1	.2	.2	.4	(Z)
	5 to 9 employees.....	2	(Z)	.1	(Z)	.1	.2	.1	.1	.1	.1
	10 to 19 employees.....	3	.1	.3	.1	.1	.3	.7	.2	.8	.1
	20 to 49 employees.....	4	.2	.9	.2	.2	.8	1.5	.7	2.0	.2
	50 to 99 employees.....	6	.5	3.0	.4	.9	2.8	4.9	2.8	6.5	1.1
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records.....	8	(Z)	.1	(Z)	(Z)	(Z)	.1	.1	.2	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. (Z) Less than 50 thousand.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1111	Anthracite.....1967..	146.0	143.5	(D)	(D)	0.5	100.0	99.8	0.2
	.....1963..	221.0	220.0	(D)	(D)	0.4	155.9	155.9	-
1112	Anthracite mining services.....1967..	9.9	9.7	(D)	-	(D)	9.7	9.7	-
	.....1963..	15.5	15.5	-	-	-	15.6	15.5	0.1

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations. See Appendix, Explanation of Terms.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. ¹Revised.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, "Individual Products")

Product code	Product	1967		1963	
		Quantity (1,000 short tons)	Value (million dollars)	Quantity (1,000 short tons)	Value (million dollars)
1111- --	ANTHRACITE, TOTAL.....	(X)	144.7	(X)	219.9
	Net anthracite shipments ¹	12,422.0	100.0	18,353.0	155.9
11111 --	Raw anthracite shipped (including interplant transfers), total.....	12,740.8	46.4	17,592.0	65.7
11111 01	For use without preparation.....	880.9	1.7	981.0	1.7
11111 03	For preparation at other establishments.....	11,859.9	44.7	16,611.0	64.0
11112 --	Prepared anthracite shipped, total.....	11,541.1	98.3	17,372.0	154.2
11112 01	Mechanically cleaned (breaker, washery, and dredge product).....	11,341.1	96.9	17,215.0	153.0
11112 03	Mechanically crushed, screened, or sized only.....	200.0	1.4	157.0	1.2
	Type of Service	1967		1963	
		Raw coal mined and culm-bank material loaded (1,000 short tons)	Receipts for services performed (million dollars)	Raw coal mined and culm-bank material loaded (1,000 short tons)	Receipts for services performed (million dollars)
1112---	ANTHRACITE MINING SERVICES, TOTAL.....	3,212.6	9.7	5,419.0	15.6
1112802	Stripping overburden.....	(X)	7.9	(X)	13.8
1112804	Strip mining anthracite not for your own account.....	2,216.4		3,913.0	
1112806	Recovering culm bank material not for your own account.....	996.2		1,506.0	
	All other services.....	(X)	0.3	(X)	0.2

Note: Detail may not add to total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents raw coal for use without preparation plus prepared coal.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1111.--ANTHRACITE				
	<u>All Establishments</u>						
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	64.3	(X)	93.8	
12119-	Raw anthracite for preparation, total.....	1,000 short tons	18,242.1	(X)	29,598.0	(X)	
	Received from other establishments.....	..do.....	11,477.6	43.7	16,326.0	63.9	
	Mined and prepared at same establishment.....	..do.....	6,764.5	(X)	13,272.0	(X)	
353011	Purchased machinery installed.....		(X)	2.2	(X)	6.8	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	1,727.4	0.4	36,100.0	2.3	
289212	Ammonium nitrate.....	..do.....	30,011.0	1.4			
289214	Blasting accessories.....		(X)	0.2		(X)	(¹)
331201	Steel mill shapes and forms ²		(X)	0.8		(X)	1.0
345210	Roof bolts.....		(X)	0.3		(X)	0.4
241100	Round or hewn woods products and stumpage ³		(X)	0.3	(X)	0.4	
970099	All other supplies used.....		(X)	9.7	(X)	15.6	
976000	Selected supplies, minerals, received for preparation, and purchased machinery installed, n.s.k. ⁴		(X)	5.6	(X)	3.8	
	Fuels purchased or transferred, total.....		(X)	1.8	(X)	2.1	
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	1.3	(Z)	26.0	0.1	
	Fuel oil:						
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	107.8	0.5	207.0	1.0	
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	..do.....	26.0	0.1	33.0	0.1	
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(Z)	(Z)	-	-	
291111	Gasoline.....	Million gallons.	1.1	0.3	4.9	0.6	
960018	Other fuels-liquified petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.1	
977000	Undistributed fuels.....		(X)	0.8	(X)	0.2	
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	5.8	(X)	158.0	(X)	
	<u>Mines Only</u>						
	Selected supplies, minerals, received for preparation, and purchased machinery installed, total.....		(X)	13.9	(X)	(NA)	
12119-	Raw anthracite for preparation received from other establishments.....	1,000 short tons	438.4	1.6	(NA)	(NA)	
353011	Purchased machinery installed.....	..do.....	(X)	1.5	(X)	(NA)	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	736.7	0.2	(NA)	(NA)	
289212	Ammonium nitrate.....	..do.....	14,162.0	0.6	(NA)	(NA)	
289214	Blasting accessories.....		(X)	0.1	(X)	(NA)	
331201	Steel mill shapes and forms ²		(X)	0.2	(X)	(NA)	
345210	Roof bolts.....		(X)	0.2	(X)	(NA)	
241100	Round or hewn woods products and stumpage ³		(X)	0.1	(X)	(NA)	
970099	All other supplies used.....		(X)	5.0	(X)	(NA)	
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k. ⁴		(X)	4.5	(X)	(NA)	
	Fuels purchased or transferred, total.....		(X)	1.0	(X)	(NA)	
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	1.0	(Z)	(Z)	(NA)	
	Fuel oil:						
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	47.0	0.2	92.0	(NA)	
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	..do.....	19.8	(Z)	29.0	(NA)	
131300	Gas-natural, manufactured and mixed.....	Million cu. ft..	(Z)	(Z)	-	-	
291111	Gasoline.....	Million gallons.	0.4	0.1	3.6	(NA)	
960018	Other fuels-liquified petroleum gas, coke, wood, and other.....		(X)	0.6	(X)	0.2	
977000	Undistributed fuels.....		(X)	0.6	(X)	0.2	
121195	Coal from this mine used at this establishment for power or heat..	1,000 short tons	0.3	(X)	10.0	(X)	

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963-Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1111.--ANTHRACITE--CON.			
	<u>Underground</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.8	(X)	(NA)
12119-	Raw anthracite for preparation, received from other establishments.....	1,000 short tons	438.4	1.6	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.1	(X)	(NA)
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	444.8	0.1	(NA)	(NA)
289212	Ammonium nitrate.....	do.....	(D)	(D)	(NA)	(NA)
289214	Blasting accessories.....		(X)	(Z)	(X)	(NA)
331201	Steel mill shapes and forms ²		(X)	0.1	(X)	(NA)
345210	Roof bolts.....		(X)	0.1	(X)	(NA)
241100	Round or hewn wood products and stumpage ³		(X)	0.1	(X)	(NA)
970099	All other supplies used.....		(X)	0.4	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery, n.s.k. ⁴		(X)	3.4	(X)	(NA)
	Fuels purchased or transferred, total.....		(X)	0.3	(X)	(NA)
121005	Coal-bituminous, lignite and anthracite.....	1,000 short tons	1.0	(Z)	-	-
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	2.9	(Z)	7.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	do.....	6.3	(Z)	4.0	(NA)
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gallons.	0.2	(Z)	3.0	(NA)
960018	Other fuels-liquified petroleum gas, coke, wood, and other....		(X)	(D)	(X)	0.2
977000	Undistributed fuels.....		(X)	0.2	(X)	
121195	Coal from this mine used at this establishment for power or heat..	1,000 short tons	0.1	(X)	1.0	(X)
	<u>Strip-Pit</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.4	(X)	(NA)
353011	Purchased machinery installed.....		(X)	0.2	(X)	(NA)
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	(NA)	(Z)	(NA)	(NA)
289212	Ammonium nitrate.....	do.....	12,889.3	0.6	(NA)	(NA)
289214	Blasting accessories.....		(X)	(D)	(X)	(NA)
331201	Steel mill shapes and forms ²		(X)	0.2	(X)	(NA)
345210	Roof bolts.....		(X)	(Z)	(X)	(NA)
241100	Round or hewn wood products and stumpage ³		(X)	(Z)	(X)	(NA)
970099	All other supplies used.....		(X)	4.0	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.3	(X)	(NA)
	Fuels purchased or transferred, total.....		(X)	0.5	(X)	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	40.3	0.2	44.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	do.....	(D)	(D)	15.0	(NA)
291111	Gasoline.....	Million gallons.	0.2	(Z)	0.5	(NA)
960018	Other fuel-liquified petroleum gas, coke, wood, and other.....		(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....		(X)	(D)	(X)	
121195	Coal from this mine used at this establishment for power or heat..	1,000 short tons	(D)	(X)	(Z)	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1111.--ANTHRACITE--CON.			
	<u>Mines With Preparation Plants</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	14.8	(X)	(NA)
12119-	Raw anthracite for preparation, total.....	1,000 short tons	8,926.3	(X)	(NA)	(NA)
	Received from other establishments.....	do.....	2,161.8	8.3	(NA)	(NA)
	Mined and prepared at same establishment.....	do.....	6,764.5	(X)	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.2	(X)	(NA)
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	863.4	0.2	(NA)	(NA)
289212	Ammonium nitrate.....	do.....	(D)	(D)	(NA)	(NA)
289214	Blasting accessories.....		(X)	0.1	(NA)	(NA)
331201	Steel mill shapes and forms ²					
345210	Roof bolts.....		(X)	0.4	(X)	(NA)
241100	Round or hewn wood products and stumpage ³		(X)	(D)	(X)	(NA)
970099	All other supplies used.....		(X)	4.5	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k. ⁴		(X)	1.1	(X)	(NA)
	Fuels purchased or transferred, total.....		(X)	0.5	(X)	(NA)
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	-	-
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels..	(D)	(D)	105.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	do.....	(D)	(D)	1.0	(NA)
291111	Gasoline.....	Million gallons	0.3	0.1	0.7	(NA)
960018	Other fuels-liquified petroleum gas, coke, wood, and other.....		(X)	(D)		
977000	Undistributed fuels.....		(X)	0.1	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	4.1	(X)	143.0	(X)
	<u>Preparation Plants Only</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	35.6	(X)	(NA)
12119-	Raw anthracite for preparation received from other establishments.....	1,000 short tons	8,877.4	33.8	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.5	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms ²		(X)	0.2	(X)	(NA)
345210	Roof bolts.....					
970099	All other supplies used.....					
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k. ⁴		(X)	1.0	(X)	(NA)
	Fuels purchased or transferred, total.....		(X)	0.3	(X)	(NA)
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	-	-	5.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	(D)	(D)	10.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	do.....	(D)	(D)	3.0	(NA)
291111	Gasoline.....	Million gallons.	0.4	0.1	0.5	(NA)
960018	Other fuels-liquified petroleum gas, coke, wood, and other.....		(X)	(Z)	-	-
977000	Undistributed fuels.....		(X)	0.1	-	-
121195	Coal from this plant used at this establishment for power or heat.	1,000 short tons	1.3	(X)	5.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1111.--ANTHRACITE--CON.			
	<u>Mechanical Cleaning⁵</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	23.8	(X)	(NA)
12119-	Raw anthracite for preparation received from other establishments.....	1,000 short tons	5,493.0	22.5	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.4	(X)	(NA)
970099	Other supplies used.....		}	(X)	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k. ⁴					
	Fuels purchased or transferred, total.....		(X)	0.2	(X)	(NA)
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	-	-	5.0	(NA)
291141	Fuel oil: Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 short tons	(D)	(D)	10.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..		(D)	(D)	3.0	(NA)
291111	Gasoline.....	Million gallons	0.2	0.1	0.5	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	(D)	-	-
121195	Coal from this plant used at this establishment for power or heat.	1,000 short tons	1.3	(X)	5.0	(X)
	<u>Mechanical Crushing, Screening and Sizing Only</u>					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	11.8	(X)	(NA)
12119-	Raw anthracite for preparation received from other establishments.....	1,000 short tons	3,148.8	11.3	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.1	(X)	(NA)
970098	Other supplies used.....		}	(X)	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k. ⁴					
	Fuels purchased or transferred, total.....		(X)	0.1	(X)	(NA)
291141	Fuel oil: Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels	(D)	(D)	(NA)	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..		(D)	(D)	(NA)	(NA)
291111	Gasoline.....	Million gallons	0.3	(Z)	(NA)	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	(D)	(X)	(NA)
121195	Coal from this plant used at this establishment for power or heat.	1,000 short tons	(Z)	(X)	(NA)	(NA)
			INDUSTRY 1112.--ANTHRACITE MINING SERVICES			
	<u>Supplies</u>					
	Selected supplies and purchased machinery installed, total.....		(X)	3.0	(X)	5.9
353011	Purchased machinery installed.....		(NA)	0.8	(NA)	2.2
2892--	Supplies used: Explosive material and blasting accessories.....		(NA)	0.1	}	(NA)
331201	Steelmill shapes and forms.....		(NA)	0.6		
970099	All other supplies.....		(NA)	0.6		
976000	Selected supplies and purchased machinery installed, n.s.k. ⁴		(X)	1.5		

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1112.--ANTHRACITE MINING SERVICES			
	<u>Supplies</u>					
	Fuels purchased or transferred, total.....	.....	(X)	0.5	(X)	0.8
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	(Z)	(Z)
	Fuel oil					
291141	Distillate (light) grade numbers, 1, 2, 4, and light diesel fuel.....	1,000 barrels	37.6	0.2	99.0	0.5
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	...do.....	(D)	(D)	7.0	(Z)
131300	Gas-natural, manufactured and mixed.....	Million cu. ft.	-	-	2.0	(Z)
291111	Gasoline.....	Million gallons	0.3	0.1	0.7	0.2
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....	.....	(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....	.....	(X)	0.2	(X)	0.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than 50 thousand.

¹Blasting accessories are included with all other supplies used.

²Represents such items as plates, sheets, strip, piling, drill steel bars, other bars, rails, wheels, track accessories, pipe, tubing, wire, wire products, and structural shapes.

³Represents such items as logs, bolts, hewn cross ties, hewn or round mine timbers and ties.

⁴This item represents the cost of supplies for establishments that did not report detailed supplies data. For 1967 this includes estimates for establishments that were not mailed report forms.

⁵Represents cleaning by wet washing or pneumatic methods (breakers and washeries).

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



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INDUSTRY SERIES

BITUMINOUS COAL AND LIGNITE MINING

SIC code	Industry
1211	Bituminous coal
1212	Lignite
1213	Bituminous and lignite mining services, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	6
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	7
2B General Statistics by Selected Counties: 1967	9
3A Detailed Statistics, by Geographic Area: 1967	10
3B Detailed Statistics, by Selected Types of Operations: 1967	14
4 General Statistics, by Employment Size of Establishment: 1967	18
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	19
6 Primary Products of the Industry, by Geographic Areas: 1967 and 1963	20
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963	22
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

BITUMINOUS COAL AND LIGNITE MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Major Industry Group 12, Bituminous Coal and Lignite Mining. This major group covers establishments primarily engaged in producing bituminous coal and lignite. The separate industries included in this group are as follows:

SIC Code and Title

1211--Bituminous Coal

1212--Lignite

1213--Bituminous Coal and Lignite Mining Services

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1211--Bituminous Coal.--This industry represents establishments primarily engaged in producing bituminous coal or in developing bituminous coal mines. This industry includes underground mining, auger mining, strip mining, and coal cleaning, crushing, screening, and sizing plants whether or not operated in conjunction with the mines served.

Industry 1212--Lignite.--This industry represents establishments primarily engaged in producing lignite or in developing lignite mines.

Industry 1213--Bituminous Coal and Lignite Mining Services.--This industry represents establishments primarily engaged in performing for others on a contract, fee, or other basis bituminous coal and lignite mining services, such as the removal of overburden, strip and auger mining, drilling, shaft sinking, and mine tunneling.

The production of coke is classified in industry 3312, Blast Furnaces and Steel Mills. The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.

SUMMARY OF FINDINGS

The combined value of shipments of the industries in Major Group 12 amounted to \$2,945 million in 1967. Of this total, the Bituminous Coal Industry had shipments of \$2,898 million, including \$303 million for raw coal sold or transferred to other establishments in the industry for preparation, and \$14 million for coal purchased and resold without further processing. The value of shipments of the Lignite Industry in 1967 was \$18 million. The remainder was accounted for by the Bituminous Coal and Lignite Mining Services Industry, with receipts of \$29 million.

Net shipments of bituminous coal and lignite in 1967 amounted to 552 million tons. An additional 0.3 million tons of such coal were mined and used in the same establishment for power or heat.

Net production, net shipments, and transfers for preparation.--The figures for "net shipments" represent all prepared coal shipped plus raw coal shipped for use without

preparation. The net shipments figures exclude coal used at the producing mine or preparation plant for power or heat and coal purchased and resold without further processing. They also exclude the raw coal sold or transferred to other establishments for preparation, thus eliminating the duplication in "total" shipments which results from inclusion of both the raw coal sold or transferred for preparation and the clean coal recovered therefrom. For individual States and counties, however, the new shipments figures include the prepared coal recovered from raw coal mined in other States or counties.

"Net production," on the other hand, represents the net tonnage of coal mined, excluding washery and other refuse, based on the location of the mining operation. For individual States and counties, such figures represent the net usable product from mines and dredges located within the boundaries of the designated areas. At the mine level, the net production includes the tonnage of prepared coal mined and prepared at the same establishment, coal mined and used at the same establishment for power or heat, the prepared or sized coal equivalent of raw coal mined for preparation at other establishments, and raw coal sold for use without preparation. In 1967, about 85 percent of all bituminous coal net shipments represented coal prepared prior to use. This includes 64 percent which was mechanically cleaned and 21 percent which was only crushed, screened, or sized. For lignite, no coal was mechanically cleaned, but 96 percent was crushed, screened, or sized. Separate figures are shown wherever possible for mechanical cleaning and for operations which crush, screen, or size only.

Contract Work.--Establishments classified in the Bituminous Coal and Lignite Mining Services Industries reported receipts of \$29 million for services performed. A total of 1.4 thousand persons were engaged in these services, accounting for a little over one percent of the total persons engaged in the Bituminous Coal and Lignite Mining Industries.

Stripping and auger mining was the principal activity of bituminous coal contractors. Such coal represents an increasing proportion of the total coal mined. Bituminous coal operators reported a total net production of 171 million tons of strip-pit mined coal, of which 6 million tons were mined for them by contractors.

Establishments classified in the Bituminous Coal and Lignite Services Industries were required to submit a separate report for each State in which mining services were performed. These reports were classified on the basis of the principal type of service performed and the principal industries served to determine their industry or subindustry classification. Each report included data on the amount received for services, the number of employees in March, the tonnage of raw coal mined, and capital expenditures during 1967, by county. For county statistics, all other figures in each report were allocated on the basis of these reported data.

The figures in this report for the Bituminous Coal and Lignite Services Industry cover, except for hauling, all service activities which represent an integral part of bituminous coal and lignite mining operations. Receipts by such contractors represent 28 percent of the total payments for contract services reported by the Bituminous Coal and Lignite Industries. In addition, a small amount of such contract work was done by operators of bituminous coal and lignite mines, presumably primarily for other coal mines, amounting to about 3 percent of payments for contract work by the Bituminous Coal and Lignite Industries. The statistics from these two sources probably represent nearly complete coverage of services of the type classified in the mineral industries.

Payments for contract work by the Bituminous Coal and Lignite Industries exceeded reported receipts for contract work by about \$77 million. Part of the difference between reported receipts and payments is accounted for by the cost of hauling coal beyond the mine property. It seems likely that a large part of the remainder represents payments made to companies engaged in contract construction of preparation plants and other facilities at mine and preparation plant properties. Capital expenditures for preparation

plant and other construction, including capitalized repairs and improvements, amounted to about \$71 million for establishments classified in the bituminous coal and lignite industries. Establishments reporting large capital expenditures of this type usually also reported substantial payments to contractors. The table below summarizes for the United States and for selected divisions and States, the available data on payments and receipts for contract services of establishments included in 1967 in the bituminous coal and lignite mining industries and the corresponding capital expenditures by bituminous coal and lignite mine and preparation plant operators for preparation plant and other construction.

PAYMENTS AND RECEIPTS FOR BITUMINOUS COAL AND LIGNITE MINING SERVICES AND AMOUNTS CAPITALIZED FOR CONSTRUCTION AT ESTABLISHMENTS IN THE BITUMINOUS COAL AND LIGNITE MINING INDUSTRIES IN THE UNITED STATES, BY SELECTED DIVISIONS AND STATES: 1967

(In millions of dollars)

Divisions and States	Cost of contract work as reported by mine or plant operators	Receipts for services reported in the bituminous coal and lignite mining industries			Excess of contract payments over receipts	Capital expenditures by operators for construction
		Total	By contractors	By operators		
United States....	109.0	32.1	29.2	¹ 2.9	76.9	71.5
Middle Atlantic (Pennsylvania).....	14.0	7.4	6.1	1.3	6.6	10.0
East North Central...	15.1	3.4	2.9	0.5	11.7	13.9
Ohio.....	7.4	3.1	2.6	0.5	4.3	2.0
Illinois.....	6.9	(Z)	(Z)	-	6.9	10.6
South Atlantic.....	52.4	17.4	16.9	0.5	39.0	23.9
Virginia.....	8.9	3.5	3.5	-	5.4	3.2
West Virginia.....	43.5	13.9	13.4	0.5	29.6	20.7
East South Central...	23.1	1.6	1.0	0.6	21.5	22.0
Kentucky.....	18.9	0.5	0.1	0.4	18.4	15.7

- Represents zero.

¹Excludes the Lignite Industry, amounting to less than \$100 thousand.

Secondary Production.--The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries. However, secondary products and services in the bituminous coal and lignite mining industries amounted to only about 0.1 percent of the total value of shipments and receipts for these industries. Only 0.06 percent of bituminous coal and lignite was produced in other industries, primarily in the clay and related products industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

Some differences occur in the similar statistics prepared by the two agencies, arising principally from differences in methods followed and objectives sought. Some of the comparable product statistics of the two agencies are shown in the table below. The reasons for such differences, to the extent that they pertain to statistics for the Bituminous Coal and Lignite Mining Industries, are summarized below:

1. The Bureau of Mines excludes all mines having an output of less than 1,000 tons a year, whereas the Bureau of the Census excludes only single unit establishments without paid employees. However, the contribution to product of such excluded establishments is usually small.

2. The Bureau of Mines statistics on both production and shipments are based primarily on data furnished by producers. These data are supplemented, however, by data from various State mine department records in order to obtain coverage of production not directly reported. The Bureau of Mines figures represent the quantity and value of net marketable coal produced, excluding washery and other refuse, distributed among the States and counties from which the coal originated. The Census statistics are on an establishment basis and take into account the actual location and type of product of the establishment as reported by the respondent making a distinction between "net production" and "net shipments." The Bureau of Mines statistics, therefore, are comparable by State and county only with the Census statistics for "net production" and are not comparable with the Census State and county figures for "net shipments."

3. Both the Bureau of Mines and the Census Bureau collected information on mechanical cleaning of coal. However, the Bureau of Mines credits the clean coal to the location or locations at which the coal was mined, whereas the Census statistics show the clean coal shipped according to the location of the cleaning plant. Both the Census and Bureau of Mines clean coal statistics represent mechanical cleaning at plants operated in conjunction with mines and at separately operated cleaning plants (these are included in the Bituminous Coal Industry) and exclude figures for coal cleaning at preparation plants operated as parts of coke ovens or other manufacturing establishments.

Both agencies obtain information on mechanical crushing and the Census, in addition, obtains data for screening and sizing. The Bureau of Mines figures for mechanical crushing show all coal crushed at mines, including that which was both crushed and mechanically cleaned. The Census figures represent coal prepared only by mechanical crushing, screening, and sizing.

4. The Bureau of Mines commodity statistics include data for State-owned or State-operated mines producing coal, with inmate labor, for use at State institutions. Government institutions, in general, are out of scope of the Census.

5. The Bureau of the Census collects information on coal purchased and resold without further processing. Data for such resales are not collected by the Bureau of Mines. The Census figures show purchased cost of \$12.0 million which was resold for \$14.4 million.

6. Differences exist in establishment coverage in certain areas for both collection agencies.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics ¹	
	Production	Shipments including interplant transfers		Production	Value of production ¹
		Quantity	Value		
	(million short tons)	(million short tons)	(million dollars)	(million short tons)	(million dollars)
BITUMINOUS COAL					
Net production and shipments.....	(NA)	545.1	2,576.8	548.1	2,546.8
Division and State					
Middle Atlantic (Pennsylvania).....	(NA)	83.2	435.0	79.4	419.3
East North Central, total.....	(NA)	(D)	(D)	129.9	502.8
Ohio.....	(NA)	46.5	185.1	46.0	176.7
Indiana.....	(NA)	19.5	75.5	18.8	73.4
Illinois.....	(NA)	(D)	(D)	65.1	252.7
West North Central, total.....	(NA)	5.9	24.8	5.7	24.1
Iowa.....	(NA)	(NA)	(NA)	0.8	3.2
Missouri.....	(NA)	(NA)	(NA)	3.7	15.6
Kansas.....	(NA)	(NA)	(NA)	1.1	5.3
South Atlantic.....	(NA)	188.5	985.8	191.8	976.7
Maryland.....	(NA)	35.8	176.9	38.0	175.6
Virginia.....	(NA)	152.8	808.8	153.7	801.0
West Virginia.....	(NA)				
East South Central, total.....	(NA)	117.8	523.3	122.6	534.9
Kentucky.....	(NA)	94.9	380.2	100.3	397.2
Tennessee.....	(NA)	22.8	143.0	22.2	137.7
Alabama.....	(NA)				
West South Central, total.....	(NA)	1.1	6.6	1.0	6.1
Arkansas.....	(NA)	0.2	1.6	0.2	1.4
Oklahoma.....	(NA)	0.8	5.0	0.8	4.7
Mountain.....	(NA)	(D)	(D)	16.7	75.1
Montana.....	(NA)	(D)	(D)	(Z)	0.3
Wyoming.....	(NA)	3.7	11.4	3.6	11.9
Colorado.....	(NA)	5.7	32.3	5.4	25.9
New Mexico.....	(NA)	(D)	(D)	3.5	12.6
Utah.....	(NA)	(D)	(D)	4.2	24.3
Pacific, total.....	(NA)	0.7	5.3	1.0	7.8
Washington.....	(NA)	(NA)	(NA)	0.1	0.5
Alaska.....	(NA)	(NA)	(NA)	0.9	7.3
LIGNITE					
Net production and shipments.....	(NA)	6.8	17.7	4.5	8.6
Division and State					
West North Central and West South Central.....	(NA)	(NA)	(NA)	4.2	8.0
Mountain (Montana and California).....	(NA)	(NA)	(NA)	0.3	0.6
BITUMINOUS COAL AND LIGNITE					
Method of Mining					
Strip-pit.....	² 177.8	(NA)	(NA)	187.1	(NA)
Underground.....	² 327.0	(NA)	(NA)	349.1	(NA)
Auger and dredge.....	10.4	(NA)	(NA)	16.4	(NA)
Undistributed.....	36.5	(NA)	(NA)	-	-
Mechanical Cleaning					
Raw coal cleaned.....	440.2	(NA)	(NA)	448.0	(NA)
Clean coal produced or shipped.....	(NA)	346.5	1,806.2	349.4	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Figures for quantity and value of shipments are not available.²Less than 50 thousand tons of underground coal produced outside the bituminous coal industry is included with the figures for strip-pit coal.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net shipments and receipts	Net production of coal (million short tons) ¹	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies, purchases for resale, and purchased energy	Coal received for preparation	Contract or subcontract work	Purchased machinery installed				
(number)	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
GROUP 12.--BITUMINOUS COAL AND LIGNITE MINING																	
1967 ² ..	(NA)	4,081	1,056	124.4	926.2	108.9	212.4	776.8	2,009.1	³ 869.8	(³)	109.6	264.3	2,944.6	2,627.8	551.7	334.3
1963...	5,841	6,305	1,166	133.9	762.3	118.6	217.6	651.0	1,606.7	458.5	285.6	66.1	197.9	2,396.4	2,100.7	464.0	218.3
1958...	6,310	6,940	1,375	188.0	915.1	163.7	268.2	762.1	1,615.7	454.5	325.7	71.3	152.2	2,430.9	2,098.5	417.7	188.5
1954...	6,113	6,865	1,467	219.2	877.4	200.0	326.5	767.3	1,424.2	388.7	204.1	55.6	122.3	2,074.8	1,812.8	391.8	120.1
1939 ⁴ ..	5,182	⁵ 5,847	(NA)	390.8	476.7	370.9	545.7	432.2	610.7	⁶ 118.8	(NA)	1.9	(NA)	(NA)	731.4	394.7	(NA)
INDUSTRY 1211.--BITUMINOUS COAL																	
1967 ² ..	(NA)	3,921	1,029	122.5	912.5	107.2	208.8	764.7	1,974.6	³ 859.7	(³)	108.9	259.0	2,897.5	2,580.7	545.1	329.5
1963...	5,663	6,115	1,143	132.0	752.5	117.0	214.4	642.3	1,578.1	³ 735.5	(³)	64.7	190.8	2,358.3	2,063.2	459.0	210.8
1958...	6,112	6,725	1,346	185.9	905.0	161.9	264.8	753.3	1,591.3	447.4	325.7	70.3	147.7	2,398.2	2,065.9	413.4	184.3
1954...	5,922	6,653	1,438	217.2	868.8	198.1	323.1	759.7	1,402.6	383.4	204.1	54.6	119.2	2,046.8	1,784.8	387.5	117.0
1939 ⁴ ..	5,021	⁵ 5,716	(NA)	389.0	474.7	369.3	542.3	430.6	607.3	⁶ 118.1	(NA)	1.9	(NA)	(NA)	727.4	391.7	(NA)
1935 ^{4,7} ..	(NA)	⁵ 6,311	(NA)	⁸ 452.3	⁸ 435.2	435.4	(NA)	402.7	554.9	103.6	(NA)	(NA)	(NA)	(NA)	658.5	372.3	(NA)
1929 ^{4,7} ..	(NA)	4,995	(NA)	482.5	633.6	458.8	(NA)	574.9	820.0	144.8	(NA)	1.9	34.9	(NA)	966.7	537.4	(NA)
1919 ⁷ ..	(NA)	6,670	(NA)	580.0	752.2	546.4	(NA)	683.4	963.1	180.4	-	2.9	(NA)	1,146.3	1,146.3	⁴ 460.4	(NA)
1909 ^{7,9} ..	3,549	4,400	(NA)	506.2	291.2	488.3	(NA)	270.7	341.7	57.7	-	2.4	(NA)	401.8	401.8	⁴ 377.0	(NA)
1902 ⁷ ..	4,409	⁵ 5,652	(NA)	295.1	196.0	¹⁰ 280.6	(NA)	181.5	264.8	24.8	(NA)	1.2	(NA)	(NA)	290.9	260.2	(NA)
1889 ⁷ ..	(NA)	⁵ 112,141	(NA)	175.4	69.9	169.1	(NA)	65.7	85.7	8.0	(NA)	0.8	(NA)	(NA)	¹¹ 94.5	¹¹ 95.7	(NA)
1880 ⁷ ..	(NA)	¹² 8,144	(NA)	109.0	33.2	(NA)	(NA)	(NA)	48.6	4.9	(NA)	(NA)	(NA)	(NA)	¹² 53.5	¹² 42.8	(NA)
1870 ⁷ ..	(NA)	1,337	(NA)	41.7	21.3	(NA)	(NA)	(NA)	33.0	2.1	(NA)	(NA)	(NA)	(NA)	35.1	19.3	(NA)
1860 ⁷ ..	(NA)	446	(NA)	11.4	4.1	(NA)	(NA)	(NA)	7.3	1.1	(NA)	(NA)	(NA)	(NA)	8.4	6.2	(NA)
1850 ⁷ ..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1.9	2.3	(NA)
1840 ⁷ ..	(NA)	(NA)	(NA)	3.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	¹³ 1.1	(NA)
INDUSTRY 1212.--LIGNITE																	
1967 ² ..	(NA)	45	7	0.5	3.3	0.4	0.8	2.6	12.9	³ 2.8	(³)	0.1	3.2	17.9	17.9	6.6	1.5
1963...	52	59	6	0.5	2.8	0.4	0.9	2.2	11.8	³ 2.3	(³)	0.3	4.3	14.1	14.0	5.0	4.6
1958...	53	58	8	0.5	2.7	0.4	0.8	2.3	9.3	1.6	-	(Z)	1.5	11.0	11.0	4.2	1.4
1954...	56	60	9	0.6	2.6	0.5	0.9	2.2	9.1	1.1	-	0.2	0.6	10.4	10.4	4.2	0.6
1939 ⁷ ..	130	⁵ 131	(NA)	1.6	1.6	1.5	3.0	1.4	2.9	0.6	(NA)	(Z)	(NA)	(NA)	3.5	3.0	(NA)
INDUSTRY 1213.--BITUMINOUS COAL AND LIGNITE MINING SERVICES																	
1967 ² ..	(NA)	115	20	1.4	10.4	1.3	2.8	9.5	21.7	7.3	(X)	0.6	2.1	29.3	29.2	(¹⁴)	3.3
1963...	131	131	17	1.3	7.0	1.2	2.3	6.4	16.8	6.3	(X)	1.1	2.7	24.0	23.6	(¹⁴)	2.9
1958...	157	157	21	1.5	7.3	1.4	2.5	6.5	15.1	5.5	(X)	0.9	2.9	21.6	21.6	(¹⁴)	2.8
1954...	152	152	20	1.4	6.1	1.3	2.5	5.5	12.5	4.2	(X)	0.8	2.6	17.6	17.6	(¹⁴)	2.4
1939...	32	(NA)	(NA)	0.2	0.3	0.2	0.4	0.2	0.5	0.1	(X)	(NA)	(NA)	0.6	0.6	(¹⁴)	(Z)
1902 ¹⁵ ..	(NA)	(NA)	(NA)	5.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1.2	(¹⁴)	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (Z) Less than \$50 thousand.

¹Represents the clean-coal equivalent of all coal mined, including coal produced and used at the same establishment for power or heat.²In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, there were 833 establishments without paid employees in the Bituminous Coal Industry, 15 establishments in the Lignite Industry, and 5 establishments in the Bituminous Coal Mining Services Industry; however, they accounted for less than 1 percent of the value added for these industries.³Figures for cost of coal received for preparation are included with those for supplies, purchases for resale, and purchased energy.⁴Excludes figures for Alaska.⁵Represents number of mines.⁶For 1939 and probably for earlier years, excludes the cost of purchases for resale.⁷For years prior to 1939, figures for the Lignite Industry are included with those for the Bituminous Coal Industry.⁸Excludes data for persons engaged at central offices not located at the mine property.⁹Adjusted to exclude data for coke manufacture at coal mines, to include "anthracite" production outside of Pennsylvania, and to transfer from wages to cost of supplies, the cost of explosives, oil, and blacksmithing furnished to miners.¹⁰Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.¹¹For 1889, includes data for 9,920 "local mines and Farmers' banks," producing about 2 percent of all coal, for which no data are available on labor or expenditures.¹²Includes data for 5,148 mines, producing 917 thousand tons of coal valued at \$1,093 thousand representing "irregular" operations for which no other data are available.¹³Reported as "27,603,191 bushels raised" of bituminous coal and 3,803 tons of anthracite raised outside of Pennsylvania.¹⁴Coal mined by the Bituminous Coal Services Industry is included in the production shown for the Bituminous Coal and Lignite Industries.¹⁵Represents number of employees engaged in all contract work and payments for all contract work as reported by companies operating bituminous coal and lignite mines.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
INDUSTRY 1211.--BITUMINOUS COAL													
United States, total.....	3,921	1,030	122.5	912.5	107.2	208.8	764.7	1,974.6	1,252.4	2,897.5	329.5	132.0	1,578.1
Geographic Area													
Northeast Region.....	715	190	22.9	173.8	19.5	38.6	140.5	327.7	256.2	530.7	53.2	24.2	275.8
Pennsylvania.....	709	188	22.8	172.1	19.5	38.6	140.5	327.7	256.2	530.7	53.2	24.0	275.8
East North Central Division.....	383	162	19.3	168.8	16.2	35.3	137.4	389.9	203.5	541.4	51.9	20.3	307.8
Ohio.....	251	83	8.3	66.5	6.8	14.3	50.5	135.0	95.1	211.6	18.4	8.3	104.9
Indiana.....	52	20	2.2	19.4	1.9	3.8	16.2	61.5	21.8	75.4	7.9	3.0	46.0
Illinois.....	80	59	8.8	82.8	7.6	17.2	70.7	193.4	86.6	254.4	25.7	9.0	156.9
West North Central Division.....	48	12	1.7	10.4	0.7	1.5	5.6	19.5	6.8	24.8	1.5	1.7	17.9
South Atlantic Division.....	1,585	382	49.6	362.1	44.4	84.3	312.5	748.1	483.4	1,102.1	(D)	53.1	602.8
Maryland.....	39	5	0.3	1.7	0.3	0.5	1.6	3.9	2.0	5.6	0.4	0.4	3.7
Virginia.....	570	97	9.4	57.1	8.4	15.1	48.5	128.7	88.1	194.0	22.9	11.3	95.6
West Virginia.....	976	280	39.9	303.3	35.7	68.7	262.4	615.5	393.3	902.5	(D)	41.3	503.4
East South Central Division.....	1,023	242	25.4	169.0	23.1	43.2	145.6	408.8	256.9	581.5	(D)	28.2	307.2
Kentucky.....	761	173	18.8	125.1	17.1	32.1	107.7	291.8	199.8	428.8	62.8	20.7	219.3
West South Central Division.....	21	5	0.3	2.1	0.3	0.5	1.8	5.2	2.3	6.6	1.0	0.5	5.5
Mountain Division.....	136	34	3.3	24.4	2.8	5.1	19.7	71.2	40.7	105.2	6.7	3.8	54.9
Utah.....	30	12	1.3	9.7	1.1	1.8	7.3	23.7	26.2	48.2	1.7	1.7	23.3
Pacific Division.....	10	3	0.2	2.0	0.1	0.3	1.6	4.2	2.6	5.2	1.5	0.4	6.2
Type of Operation													
Producing establishments, total.....	¹ 3,896	¹ 1,029	¹ 122.4	¹ 911.5	107.0	208.5	763.7	1,973.8	1,233.0	2,897.5	309.4	¹ ² 131.9	¹ 1,577.5
Mines only:													
Strip pit.....	167	46	2.9	22.3	2.6	6.0	20.0	62.0	31.6	85.2	8.3	5.2	83.4
Underground.....	2,559	292	27.6	157.1	25.7	44.2	137.3	303.2	152.6	410.9	44.9	34.6	250.1
Auger.....	23	1	0.2	1.2	0.2	0.3	1.1	3.9	1.8	5.1	0.6	0.4	7.1
Strip-pit and underground.....	4	1	0.1	0.3	0.1	0.1	0.3	1.0	0.2	1.1	0.1	0.4	4.2
Strip-pit and auger.....	31	16	0.8	5.8	0.7	1.5	5.0	13.4	10.7	21.1	3.0	0.9	16.6
Other combinations.....	9	4	0.3	2.4	0.3	0.5	2.1	9.0	7.7	13.9	2.9	1.5	15.5
Mines with preparation plants:													
Strip pit:													
With mechanical cleaning.....	83	71	6.8	67.3	6.2	14.1	60.1	229.0	106.3	290.7	44.6	6.9	175.0
With mechanical crushing, screening, or sizing.....	165	84	4.6	33.9	4.2	9.2	30.4	107.0	64.6	156.8	14.9	4.4	71.2
Underground:													
With mechanical cleaning.....	298	275	56.1	445.8	50.8	100.0	391.6	911.9	453.4	1,234.1	131.4	52.8	690.7
With mechanical crushing, screening, or sizing.....	212	99	8.3	56.5	7.6	14.9	50.1	141.8	62.2	173.2	30.9	² 9.3	² 85.4
Auger:													
With mechanical cleaning.....													
With mechanical crushing, screening, or sizing.....	16	5	0.4	2.1	0.3	0.6	1.9	6.9	5.4	11.1	1.2	(NA)	(NA)
Strip-pit and underground:													
With mechanical cleaning.....	13	9	1.5	14.4	1.5	3.1	12.6	41.5	19.0	56.8	3.7	2.9	47.6
With mechanical crushing, screening, or sizing.....	10	6	0.4	2.4	0.4	0.7	2.1	9.6	11.0	12.8	7.8	(NA)	(NA)
Strip-pit and auger:													
With mechanical cleaning.....	6	6	0.5	4.2	0.5	1.1	3.7	10.3	9.3	18.5	1.1	0.8	10.9
With mechanical crushing, screening, or sizing.....	39	22	1.1	7.6	1.1	2.3	6.9	21.9	11.7	30.6	2.9	1.4	21.7

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1211.--BITUMINOUS COAL--Continued													
Type of Operation--Con.													
Producing establishments--Con.													
Mines with preparation plants--Con.													
Other combinations and dredge:													
With mechanical cleaning.....	18	16	3.1	26.1	2.8	5.6	22.8	49.0	26.3	69.6	5.7	3.1	47.8
With mechanical crushing, screening, or sizing.....	13	4	0.4	4.0	0.4	0.9	3.7	12.2	10.7	21.7	1.1	(NA)	(NA)
Mines with other methods of preparation.....	11	-	0.1	0.5	0.1	0.2	0.5	1.5	0.6	2.0	0.1	(NA)	(NA)
Preparation plants only:													
Mechanical cleaning.....	54	17	1.3	9.7	1.1	2.1	8.3	28.1	190.5	215.5	3.1	1.9	30.3
Mechanical crushing, screening, sizing.....	56	7	0.6	3.7	0.5	1.1	3.1	10.6	57.3	66.8	1.1	² 0.8	² 11.1
Nonproducing establishments.....	25	1	0.2	1.1	0.2	0.3	0.9	0.8	19.4	-	20.2	² 0.1	² 0.6
INDUSTRY 1212.--LIGNITE													
United States, total.....	45	7	0.5	3.3	0.4	0.8	2.6	12.9	6.5	17.9	1.5	0.5	11.8
Geographic Area													
West North Central Division.....	33	5	0.3	2.1	0.3	0.6	1.6	5.5	5.3	9.4	1.3	(NA)	(NA)
West South Central Division.....	12	2	0.2	1.3	0.1	0.3	1.0	7.4	1.2	8.5	0.2	(NA)	(NA)
West Region.....												(Z)	0.5
Type of Operation													
Producing establishments:													
Mines only (strip-pit).....	27	-	(Z)	0.2	(Z)	0.1	0.2	0.4	0.3	0.7	0.1	0.1	0.8
Mines with mechanical crushing, screening, or sizing only (strip-pit).....	17	7	0.4	3.0	0.4	0.8	2.4	12.5	6.1	17.2	1.4	0.4	11.0
INDUSTRY 1213.--BITUMINOUS AND LIGNITE COAL MINING SERVICES, N.E.C.													
United States, total.....	115	18	1.4	10.4	1.3	2.8	9.5	21.6	10.9	29.2	3.3	1.3	16.8
Middle Atlantic Division (Pennsylvania)	34	5	0.3	2.1	0.3	0.7	1.9	4.5	2.6	6.1	1.1	0.5	5.1
North Central Region.....	17	2	0.1	1.1	0.1	0.2	0.8	2.3	0.6	2.6	0.3	(NA)	(NA)
South Atlantic Division.....	47	8	0.8	5.9	0.7	1.5	5.6	12.3	6.2	16.9	1.5	0.4	5.8
West Virginia.....	38	6	0.7	5.1	0.6	1.4	4.9	9.3	5.1	13.4	1.0	0.3	3.3
East South Central Division.....	10	1	0.1	0.4	0.1	0.1	0.4	0.7	0.4	1.0	0.1	0.1	1.7
West South Central Division.....	7	2	0.1	1.0	0.1	0.2	0.9	1.8	1.0	2.6	0.2	(NA)	(NA)
West Region.....													

Note: Detail may not add to the total due to independent rounding.

- Represents zero. (NA) Not available. (Z) Less than one-half of the unit of measure specified.

¹Includes data for separately reported central offices and related facilities. These were not distributed by type of operation.²Includes data for 2 or less lignite operations with less than 10 employees for which data by type of operation could not be segregated from those for bituminous coal operations without disclosing figures for individual companies.³Includes strip-pit, underground, auger, strip-pit and underground, strip-pit and auger, and other combinations and dredge mines with methods of preparation other than those specified.

TABLE 2B. General Statistics by Selected Counties: 1967

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
121.--BITUMINOUS COAL AND LIGNITE MINING													
United States, total.....	4,081	1,057	124.4	926.2	108.9	212.4	776.8	2,008.8	1,269.6	2,944.6	334.3	133.9	1,606.7
Pennsylvania:													
Allegheny.....	48	15	2.2	18.4	1.4	2.6	10.2	22.3	33.2	52.5	3.0	(NA)	(NA)
Armstrong.....	55	19	1.3	9.3	1.2	2.3	8.7	22.6	13.3	29.5	6.5	1.1	13.6
Beaver.....	8	4	0.1	.9	0.1	0.3	.8	1.5	1.6	2.9	0.2	(NA)	(NA)
Butler.....	29	5	0.4	2.7	.4	.9	2.5	5.1	4.8	9.1	0.8	0.5	4.7
Cambria.....	73	27	3.1	25.4	2.7	5.2	20.6	34.0	(D)	65.6	(D)	(NA)	(NA)
Centre.....	19	3	0.3	1.8	0.3	0.6	1.6	4.4	2.1	5.6	0.8	(NA)	(NA)
Clarion.....	20	7	0.5	2.8	0.4	1.0	2.5	8.5	5.2	11.8	1.9	0.6	8.9
Clearfield.....	87	23	1.5	8.8	1.4	2.9	7.7	19.1	15.9	32.0	3.3	2.0	20.4
Greene.....	10	6	3.3	26.4	3.0	5.7	22.9	47.8	19.0	63.7	3.2	(NA)	(NA)
Indiana.....	77	26	2.1	16.4	1.8	3.7	13.3	33.8	24.0	46.1	11.7	(NA)	(NA)
Jefferson.....	45	7	0.5	2.7	0.4	0.9	2.5	5.4	4.0	9.0	0.5	(NA)	(NA)
Mercer.....	9	3	0.1	0.9	0.1	0.3	0.8	2.3	1.2	3.1	0.4	(NA)	(NA)
Somerset.....	76	6	1.2	8.1	1.1	2.3	7.7	18.5	11.0	27.3	2.3	(NA)	(NA)
Tioga.....	10	1	0.1	1.0	0.1	.3	.8	3.0	2.2	4.3	.9	(NA)	(NA)
Washington.....	35	15	4.2	34.5	3.6	7.0	28.1	70.6	40.8	102.6	8.8	(NA)	(NA)
Westmoreland.....	42	4	0.8	5.7	0.7	1.3	4.8	12.7	5.2	17.5	0.4	1.2	15.0
North Dakota:													
Mercer lignite.....	5	3	0.2	1.1	0.1	0.3	0.8	3.1	3.9	6.1	1.0	(NA)	(NA)
West Virginia:													
Barbour.....	26	5	0.6	4.0	0.5	0.9	3.4	7.8	3.5	9.9	1.3	(NA)	(NA)
Boone.....	38	13	1.6	13.0	1.5	3.0	12.1	27.7	20.4	37.5	10.5	(NA)	(NA)
Brooke.....	9	3	0.2	1.5	0.2	0.3	1.2	2.6	1.2	3.6	0.2	0.3	2.8
Gilmer.....	7	1	0.1	0.8	0.1	0.2	0.8	1.0	1.0	1.9	0.1	(NA)	(NA)
Greenbrier.....	45	5	0.4	2.0	.4	0.6	1.8	4.2	2.2	5.7	0.7	(NA)	(NA)
Harrison.....	57	18	1.6	11.8	1.4	2.7	9.8	24.1	11.7	33.5	2.3	(NA)	(NA)
Kanawha.....	60	26	3.1	24.1	2.7	5.4	20.4	47.4	37.1	71.9	12.6	3.2	39.6
Logan.....	44	30	5.2	42.1	4.4	8.8	38.9	75.8	43.2	109.4	9.6	(NA)	(NA)
McDowell.....	144	26	5.3	38.8	4.8	8.7	33.0	91.1	76.7	158.8	8.9	(NA)	(NA)
Marion.....	22	11	3.3	27.9	2.8	5.7	23.4	63.4	29.2	78.0	14.6	(NA)	(NA)
Mason.....	8	4	0.1	0.7	0.1	0.2	0.6	1.4	0.8	2.0	0.3	(NA)	(NA)
Nicholas.....	60	14	2.4	19.0	2.2	4.4	17.5	34.1	19.3	51.0	2.4	(NA)	(NA)
Preston.....	72	8	0.7	3.1	0.5	1.2	3.0	6.9	4.7	11.1	0.5	(NA)	(NA)
Raleigh.....	83	29	3.4	25.3	3.1	6.0	22.8	47.3	30.8	65.9	11.3	(NA)	(NA)
Upshur.....	16	2	0.2	0.9	0.1	0.3	0.8	1.2	0.8	2.0	0.1	0.3	2.8
Wyoming.....	39	22	4.1	32.4	3.8	7.4	28.9	63.1	28.7	86.4	5.4	(NA)	(NA)
Kentucky:													
Clay.....	27	9	0.5	2.2	0.5	0.9	2.0	5.7	5.2	10.3	0.5	1.2	5.3
Hopkins.....	36	16	2.1	16.0	1.8	3.8	13.2	41.3	30.0	52.8	18.5	(NA)	(NA)
Knott.....	23	1	0.2	0.9	0.2	0.3	0.9	1.8	1.2	2.8	0.1	0.4	2.6
Letcher.....	85	16	1.8	11.8	1.7	3.0	10.0	19.8	14.2	32.2	1.8	1.9	13.4
Muhlenberg.....	13	8	1.1	11.4	1.0	2.3	10.3	49.3	22.5	63.2	8.7	1.5	42.0
Pike.....	213	33	3.6	21.7	3.3	5.5	18.6	48.5	36.2	74.1	10.7	3.0	28.5
Tennessee:													
Grundy.....	11	2	1.1	0.7	0.1	0.2	0.7	1.7	2.1	3.7	0.2	0.1	1.3
Scott.....	11	3	0.1	0.5	0.1	0.2	0.4	1.2	0.6	1.6	0.3	0.1	1.4
Alabama:													
Jefferson.....	48	13	3.1	22.5	2.8	5.1	18.7	57.7	24.6	74.9	7.5	(NA)	(NA)

Note: Detail may not add to total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	12- Bituminous coal and lignite mining industries, total	1211-Bituminous Coal Industry						
		United States, total	Middle Atlantic Division (Pennsylvania)	East North Central Division				West North Central Division
				Total	Ohio	Indiana	Illinois	
Establishments, total.....number..	4,081	3,921	¹ 715	383	251	52	80	48
With 1 to 19 employees.....do....	3,026	2,891	¹ 525	221	168	32	21	36
With 20 to 99 employees.....do....	741	717	¹ 135	100	64	11	25	10
With 100 employees or more.....do....	314	313	55	62	19	9	34	2
All employees (average for the year).....1,000..	124.4	122.5	¹ 22.9	19.3	8.3	2.2	8.8	1.7
Payroll (all employees), total for year..million dollars..	926.2	912.5	¹ 173.8	168.8	66.5	19.4	82.8	10.4
Production, development, and exploration workers:								
Average for the year.....1,000..	108.9	107.2	19.5	16.2	6.8	1.9	7.6	0.7
March.....do....	109.3	107.7	19.8	16.2	6.9	1.9	7.4	0.7
May.....do....	108.8	107.1	19.4	16.0	6.7	1.9	7.4	0.7
August.....do....	108.9	107.1	19.4	16.3	6.8	1.9	7.7	0.7
November.....do....	108.5	106.7	19.4	16.5	6.7	2.0	7.8	0.7
Man-hours.....millions..	212.4	208.8	38.6	35.3	14.3	3.8	17.2	1.5
January-March.....do....	54.4	53.5	10.0	8.9	3.6	1.0	4.2	0.4
April-June.....do....	52.9	52.0	9.8	8.7	3.7	0.9	4.2	0.4
July-September.....do....	51.4	50.5	9.1	8.7	3.5	0.9	4.3	0.4
October-December.....do....	53.6	52.7	9.7	9.0	3.5	1.0	4.5	0.4
Wages.....million dollars..	776.8	764.7	140.5	137.4	50.5	16.2	70.7	5.6
Supplemental labor cost not included in payroll.....do....	162.1	160.5	26.7	32.9	13.4	3.2	16.3	0.5
Legally required expenditures, including Social								
Security contributions.....do....	61.7	60.6	10.9	9.2	4.2	0.9	4.1	0.3
Payments for voluntary programs.....do....	100.5	99.9	15.9	23.7	9.3	2.2	12.2	0.2
Cost of supplies, total.....do....	1,269.7	1,252.4	256.2	203.5	95.1	21.8	86.6	6.8
Supplies used, minerals received for preparation,								
and purchased machinery installed.....do....	1,056.3	1,041.6	220.6	166.1	79.5	17.8	68.8	5.3
Cost of resales.....do....	12.0	12.0	4.1	0.5	0.4	0.1	(Z)	(Z)
Purchased fuels consumed.....do....	26.1	24.8	5.6	6.6	3.8	0.8	2.1	0.4
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	5,546.1	5,520.7	950.1	1,256.3	348.8	236.3	671.2	66.4
Cost.....million dollars..	65.6	65.1	11.8	15.2	4.0	2.5	8.8	1.0
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	109.6	108.9	14.0	15.1	7.4	0.7	6.9	0.1
Value of shipments and receipts (including resales),								
total.....do....	2,944.7	2,897.5	530.7	541.4	211.6	75.4	254.4	24.8
Value of resales.....do....	14.5	14.4	5.0	0.5	0.5	(Z)	(Z)	(Z)
Value added in mining.....do....	2,009.2	1,974.6	327.7	389.9	135.0	61.5	193.4	19.5
Capital expenditures (except land and mineral rights),								
total.....do....	334.3	329.5	53.2	51.9	18.4	7.9	25.7	1.5
Mineral development and exploration.....do....	20.3	20.3	5.7	1.7	1.6	(Z)	0.1	(Z)
New structures and additions.....do....	71.6	71.4	10.0	13.9	2.0	1.3	10.6	(Z)
New machinery and equipment.....do....	219.0	214.7	35.1	33.3	14.1	6.4	12.8	1.2
Used plant and equipment.....do....	23.4	23.1	2.5	3.1	0.8	0.1	2.2	0.2
Gross book value of fixed assets, total.....do....	3,319.3	3,267.3	722.9	658.0	223.2	85.1	349.7	38.8
Mineral properties.....do....	389.6	386.3	168.1	67.5	32.5	0.6	34.4	0.5
Building and other structures (excluding land).....do....	647.5	643.0	122.0	87.7	34.4	8.6	44.7	1.1
Machinery and equipment.....do....	2,282.1	2,237.9	432.9	502.7	156.3	75.8	270.6	37.2
Mineral development and exploration expenditures,								
total.....do....	36.3	36.2	7.3	4.2	3.0	0.4	0.8	0.2
Capitalized.....do....	22.0	22.0	6.0	1.6	1.4	(Z)	0.2	(Z)
Expensed.....do....	14.2	14.2	1.3	2.6	1.7	0.4	0.6	0.2
Mineral rights and geological expenditures.....do....	49.9	49.5	28.7	7.3	1.6	0.7	5.0	0.3
Lease and land acquisition of nonproducing acreage.....do....	30.6	30.3	24.7	3.9	0.3	(Z)	3.5	0.2
Geological and geophysical.....do....	0.8	0.8	0.2	0.2	(Z)	0.1	0.1	(Z)
Lease rents.....do....	18.5	18.4	3.9	3.3	1.3	0.6	1.4	0.1
Crude coal mined during 1967,								
by ownership.....million short tons..	551.7	545.1	83.2	(D)	46.5	19.5	(D)	5.9
Production for own account.....do....	163.9	163.2	31.9	46.5	21.6	1.6	23.3	(³)
Production for accounts of others.....do....	12.9	12.9	1.8	1.1	1.1	(Z)	(Z)	(Z)
Royalty production.....do....	310.5	304.6	37.7	74.4	18.2	16.9	39.4	4.4
Royalties paid.....million dollars..	75.6	74.8	13.6	19.5	5.7	5.0	8.8	(D)
Undistributed production.....million short tons..	64.4	64.4	11.8	(D)	5.6	1.0	(D)	³ 1.5
Man-hours worked by production, development, and								
exploration workers, total.....millions..	209.6	208.8	38.6	35.3	14.3	3.8	17.2	1.5
At mines, total.....do....	185.7	185.0	34.8	30.5	12.7	3.1	14.8	1.2
Underground.....do....	139.2	139.2	26.0	15.1	6.0	0.8	8.3	0.2
Strip-pit.....do....	27.8	27.2	6.1	9.9	4.8	1.4	3.8	0.9
Surface (including mine shops and yards).....do....	18.7	18.6	2.6	5.5	1.9	0.9	2.7	0.1
At preparation plants.....do....	24.0	23.8	3.8	4.7	1.6	0.8	2.4	0.3
Man-hours spent on exploration and development								
(included above).....do....	3.3	3.3	0.6	0.5	0.4	(Z)	0.1	(Z)
Net shipments of primary product.....million short tons..	551.7	545.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	12- Bituminous coal and lignite mining industries, total	1211-Bituminous Coal Industry								
		United States, total	Middle Atlantic Division (Pennsylvania)	East North Central Division				West North Central Division		
				Total	Ohio	Indiana	Illinois			
Total coal mined, all types.....million short tons..	551.7	545.1	83.2	(D)	46.5	19.5	(D)	5.9		
Strip-pit:										
Mined by your own employees.....do....	171.8	165.2	18.4	80.3	26.6	16.8	36.8	5.3		
Mined by outside contractor.....do....	6.0	6.0	0.7	0.9	0.9	-	-	-		
Underground.....do....	327.0	327.0	56.3	(D)	15.2	1.8	(D)	0.4		
Auger, culm bank, or dredge:										
Mined by your own employees.....do....	8.4	8.4	0.2	1.3	1.3	-	-	-		
Mined by outside contractor.....do....	2.0	2.0	0.6	0.3	0.3	-	-	-		
Undistributed type of operation.....do....	36.5	36.5	7.0	(D)	2.2	0.9	-	0.2		
1211-Bituminous coal industry-Continued										
		South Atlantic Division			East South Central Division				West South Central	
		Total	Maryland	Virginia	West Virginia	Total	Kentucky	Tennessee	Alabama	Division
Establishments, total.....number..	1,585	39	570	976	1,023	761	137	125	21	
With 1 to 19 employees.....do....	1,203	34	473	696	781	592	106	87	16	
With 20 to 99 employees.....do....	253	5	81	167	185	124	29	28	5	
With 100 employees or more.....do....	129	-	16	113	57	45	2	10	-	
All employees (average for the year).....1,000..	49.6	0.3	9.4	39.9	25.4	18.8	1.7	4.9	0.3	
Payroll (all employees), total for year..million dollars..	362.1	1.7	57.1	303.3	169.0	125.1	9.7	34.3	2.1	
Production, development, and exploration workers:										
Average for the year.....1,000..	44.4	0.3	8.4	35.7	23.1	17.1	1.6	4.5	0.3	
March.....do....	44.8	0.3	8.3	36.2	23.0	17.0	1.5	4.5	0.3	
May.....do....	44.6	0.3	8.4	35.9	23.4	17.3	1.6	4.5	0.3	
August.....do....	44.4	0.3	8.6	35.6	23.2	17.1	1.6	4.4	0.2	
November.....do....	43.7	0.3	8.5	34.9	23.0	17.0	1.6	4.5	0.3	
Man-hours.....millions..	84.3	0.5	15.1	68.7	43.2	32.1	2.9	8.3	0.5	
January-March.....do....	21.8	0.1	3.7	17.9	10.9	8.0	0.7	2.2	0.1	
April-June.....do....	21.0	0.1	3.7	17.2	10.7	7.9	0.7	2.1	0.1	
July-September.....do....	20.4	0.1	3.8	16.5	10.7	8.0	0.7	1.9	0.1	
October-December.....do....	21.2	0.1	3.9	17.1	11.0	8.2	0.7	2.1	0.1	
Wages.....million dollars..	312.5	1.6	48.5	262.4	145.6	107.7	8.7	29.3	1.8	
Supplemental labor cost not included in payroll.....do....	69.6	0.1	7.3	62.1	27.2	21.1	0.9	5.2	0.2	
Legally required expenditures, including Social Security contributions.....do....	28.3	0.1	3.3	24.9	10.1	7.5	0.7	1.9	0.1	
Payments for voluntary program.....do....	41.3	(Z)	4.0	37.3	17.1	13.6	0.2	3.4	0.1	
Cost of supplies, total.....do....	483.4	2.0	88.1	393.3	256.9	199.8	15.8	41.3	2.3	
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	395.5	1.5	72.5	321.5	216.1	167.7	13.6	34.7	1.8	
Cost of resales.....do....	5.9	0.1	2.1	3.7	1.6	1.5	(Z)	(Z)	(Z)	
Purchased fuels consumed.....do....	5.8	0.3	0.8	4.7	5.4	3.4	0.4	1.6	0.2	
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	2,171.9	1.6	341.7	1,828.6	915.1	639.2	74.1	201.8	15.8	
Cost.....million dollars..	23.8	0.1	3.8	19.9	10.8	8.3	0.3	2.1	0.2	
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
Contract work.....million dollars..	52.4	0.1	8.9	43.5	23.1	18.9	1.4	2.8	0.2	
Value of shipments and receipts (including resales), total.....do....	1,102.1	5.6	194.0	902.5	581.5	428.8	31.9	120.8	6.6	
Value of resales.....do....	6.4	0.1	2.2	4.1	2.4	2.3	0.1	(Z)	(Z)	
Value added in mining.....do....	748.1	3.9	128.7	615.5	408.8	291.8	24.2	92.7	5.2	
Capital expenditures (except land and mineral rights), total.....do....	129.4	0.4	22.9	106.2	84.2	62.8	8.2	13.2	1.0	
Mineral development and exploration.....do....	9.1	(Z)	2.8	6.2	3.3	2.5	0.7	(Z)	(Z)	
New structures and additions.....do....	23.9	(Z)	3.2	20.7	22.0	15.7	2.1	4.3	(Z)	
New machinery and equipment.....do....	83.4	0.2	16.0	67.2	55.9	42.5	4.9	8.5	0.1	
Used plant and equipment.....do....	13.1	0.1	0.9	12.1	3.0	2.0	0.6	0.4	0.8	
Gross book value of fixed assets, total.....do....	1,123.3	4.5	193.9	924.8	589.0	428.2	31.7	129.2	6.2	
Mineral properties.....do....	79.6	0.2	7.1	72.4	46.0	28.0	3.4	14.5	1.3	
Building and other structures (excluding land).....do....	297.1	0.8	73.5	222.8	112.2	74.4	6.4	31.5	0.5	
Machinery and equipment.....do....	746.6	3.6	113.4	629.6	430.8	325.8	21.8	83.1	4.5	
Mineral development and exploration expenditures, total.....do....	15.4	(Z)	3.2	12.2	6.7	4.0	0.8	1.9	0.2	
Capitalized.....do....	9.2	-	3.0	6.2	3.3	2.6	0.7	(Z)	0.1	
Expensed.....do....	6.2	(Z)	0.2	5.9	3.4	1.5	0.1	1.9	0.1	
Mineral rights and geological expenditures.....do....	7.9	0.1	1.1	6.8	4.3	3.2	0.4	0.7	0.1	
Lease and land acquisition of nonproducing acreage.....do....	0.8	(Z)	0.1	0.8	0.4	0.4	0.1	(Z)	(Z)	
Geological and geophysical.....do....	0.2	(Z)	(Z)	0.2	0.2	0.1	(Z)	(Z)	(Z)	
Lease rents.....do....	6.9	0.1	1.0	5.8	3.7	2.7	0.4	0.7	(Z)	
Net shipments of primary products.....million tons..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967-Continued

Item	1211-Bituminous coal industry-Continued								
	South Atlantic Division				East South Central Division				West South Central
	Total	Maryland	Virginia	West Virginia	Total	Kentucky	Tennessee	Alabama	Division
Crude coal mined during 1967, by ownership.....million short tons..	188.5	(2)	235.8	152.8	117.8	94.9	(5)	522.8	1.1
Production for own account.....do....	55.1	(2)	211.9	43.2	23.8	17.7	(5)	56.1	(6)
Production for accounts of others.....do....	3.6	(2)	20.3	3.3	5.5	1.2	(5)	54.3	(6)
Royalty production.....do....	106.2	(2)	214.6	91.6	68.8	60.8	(5)	58.0	(6)
Royalties paid.....million dollars..	20.5	(2)	23.2	17.3	16.8	14.3	(5)	52.6	0.1
Undistributed production.....million short tons..	23.6	(2)	29.0	14.7	19.7	15.2	(5)	54.4	61.1
Man-hours worked by production, development, and exploration workers, total..... millions..	84.3	0.5	15.1	68.7	43.2	32.1	2.9	8.3	0.5
At mines, total.....do....	75.0	0.5	13.4	61.1	38.4	28.1	2.7	7.6	0.4
Underground.....do....	65.4	0.3	12.2	52.9	28.9	21.4	2.3	5.3	0.1
Strip-pit.....do....	4.0	0.2	0.5	3.4	5.6	4.0	0.3	1.3	0.2
Surface (including mine shops and yards).....do....	5.6	(Z)	0.7	4.9	3.8	2.8	0.1	0.9	0.1
At preparation plants.....do....	9.3	(Z)	1.6	7.6	4.8	3.9	0.2	0.7	0.1
Man-hours spent on exploration and development (included above).....do....	1.4	0.1	0.2	1.1	0.8	0.5	0.1	0.3	-
Total coal mined, all types.....million short tons..	188.5	(2)	235.8	152.8	117.8	94.9	(5)	522.8	1.1
Strip-pit:									
Mined by your own employees.....do....	11.2	(2)	22.7	8.5	40.9	34.6	(5)	56.3	0.9
Mined by outside contractor.....do....	1.5	(2)	20.8	0.7	2.1	(9)	(5)	(5) (10)	-
Underground.....do....	157.5	(2)	226.9	130.6	59.4	47.2	(5)	512.1	(Z)
Auger, culm bank, or dredge:									
Mined by your own employees.....do....	4.6	(2)	20.4	4.1	2.4	2.2	(5)	50.3	(Z)
Mined by outside contractor.....do....	0.9	(2)	20.5	0.4	(12)	(9)	-	-	-
Undistributed type of operation.....do....	12.8	(2)	24.5	8.5	123.0	910.9	(5)	5103.2	0.2
	1211-Bituminous coal industry-Continued						1213-Bituminous coal and lignite mining services		
	Mountain Division				Pacific Division	1212-Lignite industry			
	Total	Wyoming	Colorado	Utah			United States	Middle Atlantic (Pennsylvania)	South Atlantic
Establishments, total.....number..	136	16	67	30	10	45	115	34	47
With 1 to 19 employees.....do....	102	9	55	18	7	38	97	29	38
With 20 to 99 employees.....do....	26	7	9	9	3	7	17	5	7
With 100 employees or more.....do....	8	-	3	3	-	-	1	-	1
All employees (average for the year).....1,000..	3.3	0.3	1.3	1.3	0.2	0.5	1.4	0.3	0.8
Payroll (all employees), total for year.....million dollars..	24.4	2.0	9.7	9.7	2.0	3.3	10.4	2.1	5.9
Production, development, and exploration workers:									
Average for the year.....1,000..	2.8	0.3	1.1	1.1	0.1	0.4	1.3	0.3	0.7
March.....do....	2.8	0.3	1.1	1.1	0.2	0.4	1.2	0.3	0.6
May.....do....	2.8	0.2	1.1	1.1	0.1	0.4	1.3	0.3	0.7
August.....do....	2.7	0.2	1.1	1.0	0.2	0.4	1.4	0.3	0.8
November.....do....	2.9	0.3	1.2	1.0	0.1	0.4	1.4	0.3	0.8
Man-hours.....millions..	5.1	0.5	2.2	1.8	0.3	0.8	2.8	0.7	1.5
January-March.....do....	1.3	0.1	0.6	0.5	0.1	0.2	0.7	0.2	0.3
April-June.....do....	1.2	0.1	0.5	0.5	0.1	0.2	0.7	0.2	0.4
July-September.....do....	1.1	0.1	0.5	0.4	0.1	0.2	0.7	0.2	0.4
October-December.....do....	1.3	0.1	0.6	0.5	0.1	0.2	0.7	0.2	0.4
Wages.....million dollars..	19.7	1.8	8.2	7.3	1.6	2.6	9.5	1.9	5.6
Supplemental labor cost not included in payroll.....do....	3.2	0.2	1.4	1.2	0.3	0.6	1.0	0.3	0.5
Legally required expenditures, including Social Security contributions.....do....	1.6	0.1	0.6	0.6	0.1	0.2	0.9	0.2	0.5
Payments for voluntary program.....do....	1.6	0.1	0.7	0.6	0.1	0.4	0.2	0.1	0.1
Cost of supplies, total.....do....	40.7	3.0	8.3	26.2	2.6	6.5	10.8	2.6	6.2
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	34.7	1.3	5.6	25.1	1.6	5.6	9.1	1.9	5.6
Cost of resales.....do....	(Z)	(Z)	(Z)	(Z)	-	(Z)	(Z)	-	(Z)
Purchased fuels consumed.....do....	0.4	0.1	0.2	0.1	0.3	0.3	1.0	0.3	0.4
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	139.9	6.2	51.7	61.2	5.2	20.1	5.3	2.8	(Z)
Cost.....million dollars..	2.2	0.1	0.9	0.8	0.2	0.4	0.1	0.1	(Z)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	3.4	1.5	1.6	0.2	0.5	0.1	0.6	0.2	0.3
Value of shipments and receipts (including resales), total.....do....	105.2	11.4	32.3	48.2	5.2	17.9	29.3	6.1	16.9
Value of resales.....do....	(Z)	(Z)	(Z)	(Z)	-	-	0.1	(Z)	(Z)
Value added in mining.....do....	71.2	8.7	27.2	23.7	4.2	12.9	21.7	4.5	12.3

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1211—Bituminous coal industry—Continued					1212—Lignite industry	1213—Bituminous coal and lignite mining services		
	Mountain Division				Pacific Division		United States	Middle Atlantic (Pennsylvania)	South Atlantic
	Total	Wyoming	Colorado	Utah					
Capital expenditures (except land and mineral rights), total.....do....	6.7	0.4	3.1	1.7	1.5	1.5	3.3	1.1	1.6
Mineral development and exploration.....do....	0.4	(Z)	0.2	0.1	0.1	(Z)	(Z)	-	(Z)
New structures and additions.....do....	1.2	(Z)	1.1	(Z)	0.5	0.1	0.1	(Z)	(Z)
New machinery and equipment.....do....	4.8	0.3	1.8	1.4	1.0	1.3	3.0	1.0	1.4
Used plant and equipment.....do....	0.4	0.1	0.1	0.2	-	0.1	0.2	0.1	0.1
Gross book value of fixed assets, total.....do....	123.3	12.9	29.1	57.3	5.8	32.3	19.7	7.3	7.2
Mineral properties.....do....	23.1	0.4	1.9	15.6	0.4	3.3	-	-	-
Building and other structures (excluding land).....do....	21.4	4.6	3.1	5.7	1.0	3.7	0.8	0.3	0.3
Machinery and equipment.....do....	78.8	7.9	24.0	36.0	4.4	25.3	18.9	7.0	6.9
Mineral development and exploration expenditures, total.....do....	2.0	0.1	1.7	0.2	0.1	0.1	(X)	(X)	(X)
Capitalized.....do....	1.8	-	1.5	0.2	0.1	(Z)	(X)	(X)	(X)
Expensed.....do....	0.2	0.1	0.2	(Z)	(Z)	(Z)	(X)	(X)	(X)
Mineral rights and geological expenditures.....do....	0.8	0.4	0.2	0.1	(Z)	0.4	(Z)	(Z)	-
Lease and land acquisition of nonproducing acreage.....do....	0.2	0.2	(Z)	(Z)	(Z)	0.3	-	-	-
Geological and geophysical.....do....	0.1	-	0.1	(Z)	-	(Z)	(Z)	(Z)	-
Lease rents.....do....	0.5	0.2	0.2	0.1	(Z)	0.1	-	-	-
Net shipments of primary product.....million short tons..									
Crude coal mined during 1967, by ownership.....do....	(D)	3.7	5.7	(D)	0.7	6.6	(X)	(X)	(X)
Production for own account.....do....	4.2	(³)	(⁷)	(D)	(⁸)	0.7	(X)	(X)	(X)
Production for accounts of others.....do....	(D)	-	(⁷)	-	-	(Z)	(X)	(X)	(X)
Royalty production.....do....	11.8	2.8	3.4	2.8	(⁸)	5.9	(X)	(X)	(X)
Royalties paid.....million dollars..	2.4	0.4	0.8	0.7	(D)	0.8	(X)	(X)	(X)
Undistributed.....1,000 short tons..	(D)	³ 0.9	⁷ 2.3	(D)	⁸ 0.7	-	(X)	(X)	(X)
Man-hours worked by production, development, and exploration workers, total.....millions..	5.1	0.2	0.2	0.1	(Z)	0.1	-	-	-
At mines, total.....do....	4.4	0.4	1.9	1.6	0.2	0.7	(⁴)	(⁴)	(⁴)
Underground.....do....	3.3	0.1	1.6	1.3	0.1	-	(⁴)	(⁴)	(⁴)
Strip-pit.....do....	0.4	0.2	0.1	-	0.1	0.6	(⁴)	(⁴)	(⁴)
Surface (including mine shops and yards).....do....	0.8	0.1	0.2	0.3	0.1	0.1	(⁴)	(⁴)	(⁴)
At preparation plants.....do....	0.6	0.1	0.3	0.2	0.1	0.2	(⁴)	(⁴)	(⁴)
Man-hours spent on exploration and development (included above).....do....	(Z)	-	(Z)	(Z)	-	-	(X)	(X)	(X)
Total coal mined, all types.....million short tons..	(D)	3.7	5.7	(D)	0.7	6.6	(X)	(X)	(X)
Strip-pit:									
Mined by your own employees.....do....	7.5	2.7	2.0	-	(D)	6.6	(X)	(X)	(X)
Mined by outside contractor.....do....	(D)	(¹¹)	-	-	-	(Z)	(X)	(X)	(X)
Underground.....do....	8.4	(¹¹)	3.6	4.0	(D)	-	(X)	(X)	(X)
Auger, culm bank, or dredge:									
Mined by your own employees.....do....	(Z)	-	(Z)	-	-	-	(X)	(X)	(X)
Mined by outside contractor.....do....	-	-	-	-	-	-	(X)	(X)	(X)
Undistributed type of operation.....do....	¹² (D)	¹¹ 1.0	0.1	(D)	-	-	(X)	(X)	(X)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Includes data for 2 central administrative offices in Massachusetts and 4 central administrative offices in New York.²Figures for Maryland are included with those for Virginia.³Production for own account is included with undistributed production.⁴Man-hours for the Bituminous Coal and Lignite Mining Service industry are represented by the following:

Item	United States	Middle Atlantic (Pennsylvania)	South Atlantic
Man-hours worked by production, development, and exploration workers, total.....millions..	2.8	0.7	1.5
Exploration work, including geophysical and other exploratory surveying.....do....	0.1	(Z)	0.1
Stripping overburden.....do....	0.1	(Z)	(Z)
Mining minerals not for your own account.....do....	1.1	0.4	0.6
Other work.....do....	1.5	0.2	0.9

⁵Figures for Tennessee are included with those for Alabama.⁶Production for own account, production for accounts of others, and royalty production are included with undistributed production.⁷Production for own account and production for accounts of others are included with undistributed production.⁸Production for own account and royalty production are included with undistributed production.⁹Figures for strip pit, mined by outside contractor, and auger, culm bank, or dredge, mined by outside contractor, are included with those for undistributed type of operation.¹⁰Figures for strip-pit, mined by outside contractor, are included with those for undistributed type of operation.¹¹Figures for strip-pit, mined by outside contractor, and underground are included with those for undistributed type of operation.¹²Figures for auger, culm bank, or dredge, mined by outside contractor, are included with those for undistributed type of operation.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	1211.-Bituminous coal							
	All establishments	Producing establishments						
		Total	Mines only					Other combinations
			Total	Strip-pit	Under-ground	Auger	Strip-pit and auger	
Establishments, total.....number..	3,921	² 3,896	2,793	167	2,559	23	31	13
With 1 to 19 employees.....do....	2,891	² 2,867	2,433	121	2,267	22	15	8
With 20 to 99 employees.....do....	717	² 716	319	45	253	1	15	5
With 100 employees or more.....do....	313	313	41	1	39	-	1	-
All employees (average for year).....1,000..	122.5	² 122.4	32.0	2.9	27.6	0.2	0.8	0.4
Payroll (all employees), total for year..million dollars..	912.5	² 911.5	189.1	22.3	157.1	1.2	5.8	2.7
Production, development, and exploration workers:								
Average for the year.....1,000..	107.2	107.0	29.6	2.6	25.7	0.2	0.7	0.4
March.....do....	107.7	107.5	30.0	2.7	26.0	0.2	0.7	0.4
May.....do....	107.1	107.0	29.9	2.6	25.9	0.2	0.8	0.4
August.....do....	107.1	107.0	29.5	2.6	25.6	0.2	0.7	0.4
November.....do....	106.7	106.5	28.9	2.5	25.2	0.2	0.6	0.4
Man-hours, total.....millions..	208.8	208.5	52.7	6.0	44.2	0.3	1.5	0.7
January-March.....do....	53.5	53.4	13.7	1.5	11.5	0.1	0.4	0.2
April-June.....do....	52.0	51.9	13.3	1.6	11.0	0.1	0.4	0.2
July-September.....do....	50.5	50.4	12.9	1.5	10.7	0.1	0.4	0.2
October-December.....do....	52.7	52.7	13.0	1.4	11.0	0.1	0.3	0.2
Wages.....million dollars..	764.7	763.7	165.8	20.0	137.3	1.1	5.0	2.4
Supplemental labor cost not included in payroll.....do....	160.5	160.3	26.5	3.9	21.4	0.1	0.5	0.5
Legally required expenditures, including Social Security contributions.....do....	60.6	60.5	11.9	1.4	9.8	0.1	0.4	0.2
Payments for voluntary program.....do....	99.9	99.8	14.5	2.5	11.6	(Z)	0.1	0.3
Cost of supplies, total.....do....	1,252.4	1,233.0	204.7	31.6	152.6	1.8	10.7	8.0
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	1,041.6	1,038.5	155.1	21.2	121.5	1.1	7.1	4.2
Cost of resales.....do....	12.0	12.0	4.2	0.3	3.5	-	0.4	-
Purchased fuels consumed.....do....	24.8	24.8	7.8	3.6	2.8	0.2	1.0	0.2
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	5,520.7	5,511.8	807.6	114.4	685.3	0.6	1.1	6.2
Cost.....million dollars..	65.1	65.0	10.5	1.1	9.2	(Z)	(Z)	0.2
Generated less sold.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....do....	108.9	92.7	26.8	5.3	15.6	0.5	2.2	3.3
Value of shipments and receipts (including resales), total.....do....	2,897.5	2,897.5	537.3	85.2	410.9	5.1	21.1	15.0
Value of resales.....do....	14.4	14.4	5.0	0.3	4.3	-	0.4	-
Value added in mining.....do....	1,974.6	1,973.8	392.5	62.0	303.2	3.9	13.4	10.0
Capital expenditures (except land and mineral rights), total.....do....	329.5	309.4	59.8	8.3	44.9	0.6	3.0	3.0
Mineral development and exploration.....do....	20.3	16.8	1.7	0.2	1.1	(Z)	0.1	0.3
New structures and additions.....do....	71.4	59.7	11.6	0.7	10.8	-	(Z)	0.1
New machinery and equipment.....do....	214.7	210.3	34.4	5.7	25.0	0.5	1.7	1.5
Used plant and equipment.....do....	23.1	22.5	12.2	1.8	8.1	0.2	1.2	1.0
Gross book value of fixed assets, total.....do....	3,267.3	3,235.7	542.6	92.0	423.7	2.9	13.3	10.7
Mineral properties.....do....	386.3	379.2	61.3	11.7	45.3	(Z)	0.5	3.8
Building and other structures (excluding land).....do....	643.0	629.6	90.0	6.6	81.3	0.1	1.2	0.8
Machinery and equipment.....do....	2,237.9	2,226.7	391.2	73.7	297.0	2.7	11.7	6.1
Mineral development and exploration expenditures, total.....do....	36.2	32.6	6.5	0.3	5.5	0.1	0.3	0.3
Capitalized.....do....	22.0	18.5	1.8	0.2	0.9	0.1	0.3	0.3
Expensed.....do....	14.2	14.1	4.7	0.1	4.6	-	(Z)	-
Mineral rights and geological expenditures.....do....	49.5	49.3	5.8	1.7	3.7	0.1	0.2	0.2
Lease and land acquisition of nonproducing acreage.....do....	30.3	30.2	1.3	0.3	0.9	-	(Z)	0.1
Geological and geophysical.....do....	0.8	0.8	0.2	0.1	0.1	-	(Z)	(Z)
Lease rents.....do....	18.4	18.3	4.5	1.3	2.8	0.1	0.2	0.1
Crude coal mined during 1967, by ownership.....do....	545.1	545.1	(³)	(³)	(³)	(³)	(³)	(³)
Production for own account.....do....	163.2	163.2	37.0	7.6	27.1	0.1	2.1	0.2
Production for accounts of others.....do....	12.9	12.9	5.4	1.0	2.0	0.4	2.0	-
Royalty production.....do....	304.6	304.6	38.4	11.6	22.3	0.4	1.9	1.9
Royalties paid.....million dollars..	74.8	74.8	11.4	3.6	6.2	0.1	0.8	0.6
Undistributed production.....1,000 short tons..	64.4	64.4	(³)	(³)	(³)	(³)	(³)	(³)
Man-hours worked by production, development, and exploration workers, total.....millions..	208.8	208.5	52.7	6.0	44.2	0.3	1.5	0.7
At mines, total.....do....	185.0	184.9	52.7	6.0	44.2	0.3	1.5	0.7
Underground.....do....	139.2	139.0	41.5	-	41.5	-	-	-
Strip-pit.....do....	27.2	27.2	7.6	5.3	-	0.3	1.4	0.7
Surface (including mine shops and yards).....do....	18.6	18.6	3.6	0.7	2.7	(Z)	0.1	(Z)
At preparation plants.....do....	23.8	23.7	-	-	-	-	-	-
Man-hours spent on exploration and development (included above).....do....	3.3	3.2	1.4	0.3	0.9	(Z)	0.1	-

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1211.-Bituminous coal							
	All establish- ments	Producing establishments *						
		Mines only						
		Total	Total	Strip-pit	Under- ground	Auger	Strip-pit and auger	Other combina- tions
Total coal mined, all types.....million short tons..	545.1	545.1	(³)	(³)	(³)	(³)	(³)	(³)
Strip-pit:								
Mined by your own employees.....do....	165.2	165.2	28.1	22.2	-	-	4.5	1.3
Mined by outside contractor.....do....	6.0	6.0	1.4	0.8	-	-	0.2	0.4
Underground.....do....	327.0	327.0	60.7	-	60.4	-	-	0.3
Auger, culm bank, or dredge:								
Mined by your own employees.....do....	8.4	8.4	3.6	-	1.6	2.0	(Z)	4.8
Mined by outside contractor.....do....	2.0	2.0	0.2	-	-	(Z)	(Z)	0.2
Undistributed type of mining.....do....	36.1	36.1	(³)	(³)	(³)	(³)	(³)	(³)
1211.-Bituminous coal--Continued								
Producing establishments--Continued								
Mines with preparation plants								
Total	Total	Strip-pit		Underground		Strip-pit and underground		
		With mechanical cleaning	With mechanical crushing, screening, or sizing	With mechanical cleaning	With mechanical crushing, screening, or sizing	Auger	With mechanical cleaning	With mechanical crushing, screening, or sizing
Establishments, total.....number..	884	83	165	298	212	16	13	10
With 1 to 19 employees.....do....	287	12	81	23	113	11	4	4
With 20 to 99 employees.....do....	340	41	78	91	81	4	3	5
With 100 employees or more.....do....	257	30	6	184	18	1	6	1
All employees (average for year).....1,000..	83.3	6.8	4.6	56.1	8.3	0.4	1.5	0.4
Payroll (all employees), total for year..million dollars..	664.8	67.3	33.9	445.8	56.5	2.1	14.4	2.4
Production, development, and exploration workers:								
Average for the year.....1,000..	75.9	6.2	4.2	50.8	7.6	0.3	1.5	0.4
March.....do....	75.9	6.1	4.3	50.9	7.5	0.3	1.5	0.3
May.....do....	75.6	6.1	4.1	50.8	7.5	0.3	1.4	0.3
August.....do....	75.9	6.2	4.2	50.9	7.6	0.3	1.4	0.4
November.....do....	76.1	6.3	4.2	50.9	7.9	0.3	1.4	0.4
Man-hours, total.....millions..	152.7	14.1	9.2	100.0	14.9	0.6	3.1	0.7
January-March.....do....	39.0	3.5	2.3	25.9	3.8	0.1	0.8	0.2
April-June.....do....	37.9	3.5	2.3	24.7	3.7	0.2	0.7	0.2
July-September.....do....	36.9	3.5	2.3	23.9	3.6	0.2	0.8	0.2
October-December.....do....	39.0	3.7	2.3	25.4	3.9	0.1	0.8	0.2
Wages.....million dollars..	586.4	60.1	30.4	391.6	50.1	1.9	12.6	2.1
Supplemental labor cost not included in payroll.....do....	131.9	11.6	3.7	97.6	9.2	0.2	1.5	0.3
Legally required expenditures, including Social								
Security contributions.....do....	47.4	3.3	2.1	33.9	4.0	0.1	1.0	0.2
Payments for voluntary program.....do....	84.4	8.3	1.6	63.8	5.2	(Z)	0.4	0.1
Cost of supplies, total.....do....	780.5	106.3	64.6	453.4	62.2	5.4	19.0	11.0
Supplies used, minerals received for preparation,								
and purchased machinery installed.....do....	641.0	88.4	49.0	394.5	50.6	4.2	13.1	5.3
Cost of resales.....do....	7.6	(Z)	0.6	1.6	3.0	0.5	(Z)	(Z)
Purchased fuels consumed.....do....	16.0	4.7	4.9	1.9	0.7	0.2	0.6	0.3
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	4,483.0	802.0	180.1	2,913.1	239.3	9.6	120.0	6.3
Cost.....million dollars..	51.9	9.8	2.3	32.4	3.4	0.1	1.2	0.1
Generated less sold.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....do....	64.0	3.4	7.8	23.0	4.5	0.4	4.1	5.3
Value of shipments and receipts (including resales),								
total.....do....	2,077.9	290.7	156.8	1,234.1	173.2	11.1	56.8	12.8
Value of resales.....do....	8.9	(Z)	0.7	1.7	4.1	0.5	(Z)	(Z)
Value added in mining.....do....	1,542.6	229.0	107.0	911.9	141.8	6.9	41.5	9.6
Capital expenditures (except land and mineral rights),								
total.....do....	245.4	44.6	14.9	131.4	30.9	1.2	3.7	7.8
Mineral development and exploration.....do....	14.9	0.1	0.7	10.0	3.7	(Z)	(Z)	-
New structures and additions.....do....	47.5	10.6	0.9	20.2	6.2	0.1	1.3	5.6
New machinery and equipment.....do....	174.2	32.9	11.7	97.6	19.6	1.0	2.0	2.0
Used plant and equipment.....do....	8.7	1.0	1.6	3.6	1.4	0.1	0.3	0.2
Gross book value of fixed assets, total.....do....	2,564.6	417.2	166.0	1,589.6	187.3	8.2	66.9	16.2
Mineral properties.....do....	316.0	25.3	8.8	234.3	33.3	1.2	0.2	4.1
Building and other structures (excluding land).....do....	493.2	41.5	22.2	377.0	25.0	3.9	3.0	6.0
Machinery and equipment.....do....	1,755.4	350.4	135.0	978.2	128.9	3.2	63.8	6.1
Mineral development and exploration expenditures,								
total.....do....	25.4	1.3	1.5	15.2	5.8	0.1	0.4	0.1
Capitalized.....do....	16.2	0.1	0.8	11.0	4.1	(Z)	(Z)	-
Expensed.....do....	9.2	1.2	0.7	4.2	1.7	(Z)	0.4	0.1
Mineral rights and geological expenditures.....do....	43.1	2.2	2.2	30.1	5.7	0.5	0.3	0.1
Lease and land acquisition of nonproducing acreage.....do....	29.0	0.3	0.7	24.2	3.9	-	(Z)	-
Geological and geophysical.....do....	0.7	0.3	0.1	0.2	0.1	(Z)	-	-
Lease rents.....do....	13.4	1.7	1.4	5.7	1.7	0.5	0.3	0.1

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1211.-Bituminous coal--Continued							
	Producing establishments--Continued							
	Mines with preparation plants							
	Total	Strip-pit		Underground		Auger	Strip-pit and underground	
With mechanical cleaning		With mechanical crushing, screening, or sizing	With mechanical cleaning	With mechanical crushing, screening, or sizing	With mechanical cleaning		With mechanical crushing, screening, or sizing	
Crude coal mined during 1967, by ownership.....do....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Production for own account.....do....	126.3	18.8	10.6	77.1	14.0	0.1	0.6	-
Production for accounts of others.....do....	7.6	0.4	1.3	4.3	(Z)	-	-	-
Royalty production.....do....	266.1	51.5	28.3	134.0	16.2	1.7	13.3	1.2
Royalties paid.....million dollars..	63.3	15.2	8.6	26.9	3.1	0.7	4.3	0.4
Undistributed.....1,000 short tons..	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Man-hours worked by production, development, and exploration workers, total..... millions..	152.7	14.1	9.2	100.0	14.9	0.6	3.1	0.7
At mines, total.....do....	132.3	10.9	7.7	88.1	13.1	0.5	2.6	0.6
Underground.....do....	97.5	-	-	79.8	12.1	-	1.3	0.3
Strip-pit.....do....	19.7	7.7	6.4	-	-	0.4	1.1	0.3
Surface (including mine shops and yards).....do....	15.0	3.2	1.3	8.3	1.0	(Z)	0.3	(Z)
At preparation plants.....do....	20.5	3.2	1.4	11.9	1.8	0.1	0.6	0.1
Man-hours spent on exploration and development (included above).....do....	1.8	(Z)	0.2	0.9	0.4	(Z)	0.1	(Z)
Total coal mined, all types.....million short tons..	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Strip-pit:								
Mined by your own employees.....do....	137.0	73.7	40.9	-	-	-	9.5	1.5
Mined by outside contractor.....do....	4.6	0.2	2.2	-	-	-	0.3	1.2
Underground.....do....	266.2	-	-	216.2	33.5	-	4.3	1.2
Auger, culm bank, or dredge:								
Mined by your own employees.....do....	4.8	-	-	-	-	1.7	-	-
Mined by outside contractor.....do....	1.7	-	-	-	-	0.1	-	-
Undistributed type of mining.....do....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
1211.-Bituminous coal--Continued								
Producing establishments--Continued							Non-producing establishments	1211.-Lignite, all establishments
Mines with preparation plants--Continued			Preparation plants only					
Strip-pit and auger		Other ¹	Total	Mechanical cleaning	Mechanical crushing, screening, or sizing			
With mechanical cleaning	With mechanical crushing, screening, or sizing							
Establishments, total.....number..	6	39	42	110	54	56	25	45
With 1 to 19 employees.....do....	-	17	22	86	37	49	24	38
With 20 to 99 employees.....do....	5	22	10	21	14	7	1	7
With 100 employees or more.....do....	1	-	10	3	3	-	-	-
All employees (average for year).....1,000..	0.5	1.1	3.6	1.9	1.3	0.6	0.2	0.5
Payroll (all employees), total for year.....million dollars..	4.2	7.6	30.6	13.4	9.7	3.7	1.1	3.3
Production, development, and exploration workers:								
Average for the year.....1,000..	0.5	1.1	3.3	1.6	1.1	0.5	0.2	0.4
March.....do....	0.5	1.0	3.4	1.7	1.2	0.5	0.2	0.4
May.....do....	0.5	1.0	3.4	1.6	1.1	0.5	0.2	0.4
August.....do....	0.4	1.1	3.3	1.6	1.1	0.5	0.2	0.4
November.....do....	0.5	1.1	3.3	1.6	1.1	0.5	0.2	0.4
Man-hours, total.....millions..	1.1	2.3	6.7	3.2	2.1	1.1	0.3	0.8
January-March.....do....	0.3	0.6	1.7	0.8	0.6	0.3	0.1	0.2
April-June.....do....	0.3	0.6	1.7	0.8	0.5	0.3	0.1	0.2
July-September.....do....	0.3	0.6	1.6	0.8	0.5	0.3	0.1	0.2
October-December.....do....	0.3	0.6	1.6	0.8	0.5	0.3	0.1	0.2
Wages.....million dollars..	3.7	6.9	27.0	11.3	8.3	3.1	0.9	2.6
Supplemental labor cost not included in payroll.....do....	0.3	0.8	6.8	2.2	1.9	0.3	0.1	0.6
Legally required expenditures, including Social Security contributions.....do....	0.2	0.5	2.1	1.1	0.9	0.2	0.1	0.2
Payments for voluntary program.....do....	0.1	0.2	4.7	1.1	1.0	0.1	(Z)	0.4
Cost of supplies, total.....do....	9.3	11.7	37.6	247.8	190.5	57.3	19.4	6.5
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	5.2	7.1	23.6	242.3	186.0	56.3	3.1	5.6
Cost of resales.....do....	1.1	0.1	0.7	0.3	0.3	(Z)	-	(Z)
Purchased fuels consumed.....do....	0.5	1.2	0.9	0.9	0.8	0.1	(Z)	0.3
Electric energy:								
purchased:								
Quantity.....million kw.-hrs..	44.8	36.3	131.5	228.2	188.6	39.6	8.9	20.1
Cost.....million dollars..	0.5	0.3	1.8	2.6	2.0	0.6	0.1	0.4
Generated less sold.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....do....	1.9	3.0	10.6	1.8	1.5	0.3	16.3	0.1
Value of shipments and receipts (including resales), total.....do....	18.5	30.6	93.3	282.4	215.5	66.8	-	17.9
Value of resales.....do....	1.1	0.1	0.7	0.5	0.4	(Z)	-	-

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1211.-Bituminous coal-Continued							1211.-Lignite, all establishments
	Producing establishments--Continued						Non-producing establishments	
	Mines with preparation plants--Continued			Preparation plants only				
	Strip-pit and auger		Other ¹	Total	Mechanical cleaning	Mechanical crushing, screening, or sizing,		
	With mechanical cleaning	With Mechanical crushing, screening, or sizing						
Value added in mining.....do....	10.3	21.9	62.7	38.7	28.1	10.6	0.8	12.9
Capital expenditures (except land and mineral rights), total.....do....	1.1	2.9	6.9	4.2	3.1	1.1	20.2	1.5
Mineral development and exploration.....do....	(Z)	0.2	0.1	0.2	0.2	(Z)	3.6	(Z)
New structures and additions.....do....	(Z)	0.1	2.5	0.5	0.3	0.2	11.7	0.1
New machinery and equipment.....do....	1.0	2.5	3.9	1.7	1.2	0.5	4.3	1.3
Used plant and equipment.....do....	(Z)	0.1	0.4	1.8	1.4	0.4	0.6	0.1
Gross book value of fixed assets, total.....do....	23.2	28.5	61.5	128.5	97.8	30.7	31.6	32.3
Mineral properties.....do....	1.0	1.2	6.6	2.0	0.6	1.4	7.0	3.3
Building and other structures (excluding land)....do....	1.2	2.1	11.3	46.4	29.4	17.0	13.4	3.7
Machinery and equipment.....do....	21.0	25.2	43.6	80.1	67.8	12.3	11.2	25.3
Mineral development and exploration expenditures, total.....do....	0.1	0.5	0.4	0.8	0.3	0.6	3.6	0.1
Capitalized.....do....	(Z)	(Z)	0.1	0.5	0.2	0.3	3.5	(Z)
Expensed.....do....	0.1	0.5	0.3	0.3	(Z)	0.3	0.1	(Z)
Mineral rights and geological expenditures.....do....	0.5	0.9	0.6	0.5	0.1	0.4	0.2	0.4
Lease and land aquisition of nonproducing acreage.do....	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.3
Geological and geophysical.....do....	(Z)	(Z)	(Z)	-	-	-	(Z)	(Z)
Lease rents.....do....	0.5	0.9	0.5	0.5	0.1	0.4	0.1	0.1
Crude coal mined during 1967, by ownership.....do....	(³)	(³)	(³)	-	-	-	-	6.6
Production for own account.....do....	(Z)	1.4	3.8	-	-	-	-	0.7
Production for accounts of others.....do....	0.4	0.3	0.9	-	-	-	-	(Z)
Royalty production.....do....	3.1	5.0	11.7	-	-	-	-	5.9
Royalties paid.....million dollars..	1.1	1.7	2.2	-	-	-	-	0.8
Undistributed production.....1,000 short tons...	(³)	(³)	(³)	-	-	-	-	-
Man-hours worked by production, development, and exploration workers, total..... millions..	1.1	2.3	6.7	3.2	2.1	1.1	0.3	0.8
At mines, total.....do....	1.0	1.9	5.9	-	-	-	0.2	0.7
Underground.....do....	-	-	4.0	-	-	-	0.2	-
Open-pit.....do....	0.8	1.8	1.3	-	-	-	(Z)	0.6
Surface (including mine shops and yards).....do....	0.1	0.1	0.6	-	-	-	(Z)	0.1
At preparation plants.....do....	0.1	0.4	0.8	3.2	2.1	1.1	0.1	0.2
Man-hours spent on exploration and development (included above).....do....	(Z)	(Z)	0.1	(Z)	-	(Z)	0.1	-
Total coal mined, all types.....million short tons...	(³)	(³)	(³)	-	-	-	-	6.6
Strip-pit:								
Mined by your own employees.....do....	3.1	5.4	2.9	-	-	-	-	6.6
Mined by outside contractor.....do....	-	0.4	1.3	-	-	-	-	(Z)
Underground.....do....	-	-	10.9	-	-	-	-	-
Auger, culm bank, or dredge:								
Mined by your own employees.....do....	(Z)	1.5	1.6	-	-	-	-	-
Mined by outside contractor.....do....	0.3	0.4	0.9	-	-	-	-	-
Undistributed type of mining.....do....	(³)	(³)	(³)	-	-	-	-	-

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents other combinations and dredge mines with mechanical cleaning and mechanical crushing, screening, and sizing, and includes strip-pit, underground, auger, strip-pit and underground, and strip-pit and auger mines with methods of preparation other than those specified.

²Includes data for separately reported central offices and related facilities. These were not distributed by type of operation.

³Figures for this item were not included in this table because they did not meet publication standards.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Item	Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
		Number	Payroll	Number	Man-hours	Wages				
	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
1211 Bituminous coal:										
Establishments, total.....	3,921	122.5	912.5	107.2	208.8	764.7	1,974.6	1,252.4	2,897.5	329.5
Establishments with an average of-										
0 to 4 employees.....	1,673	2.5	11.7	2.4	3.7	10.3	36.4	40.0	64.4	12.0
5 to 9 employees.....	582	4.0	18.7	3.7	6.1	16.2	43.2	57.3	84.9	15.5
10 to 19 employees.....	636	8.6	46.2	7.9	14.0	38.9	104.4	83.8	168.1	20.5
20 to 49 employees.....	526	15.8	97.2	13.9	26.3	80.8	207.6	186.9	351.3	44.9
50 to 99 employees.....	191	13.6	106.1	11.6	23.5	86.1	241.8	183.8	356.6	67.1
100 to 249 employees.....	206	33.8	276.9	29.4	59.6	232.7	626.3	396.8	915.7	107.4
250 to 499 employees.....	89	31.6	252.7	27.8	54.0	213.2	517.4	214.7	682.6	49.4
500 to 999 employees.....	17	<u>12.8</u>	<u>102.9</u>	<u>10.6</u>	<u>21.7</u>	<u>86.4</u>	<u>197.4</u>	<u>89.1</u>	<u>274.0</u>	<u>12.8</u>
1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
Estabs. covered by admin. records ¹	1,142	1.3	5.7	1.3	1.9	5.3	18.2	9.0	24.9	2.3
1212 Lignite:										
Establishments, total.....	45	0.5	3.3	0.4	0.8	2.6	12.9	6.5	17.9	1.5
Establishments with an average of-										
0 to 4 employees.....	26	(Z)	0.1	(Z)	0.1	0.1	0.3	0.3	0.5	-
5 to 9 employees.....	7	0.1	0.3	(Z)	0.1	0.3	0.5	0.6	0.9	0.2
10 to 19 employees.....	5	(Z)	0.4	(Z)	0.1	0.3	1.5	0.5	1.9	(Z)
20 to 49 employees.....	5	<u>0.4</u>	<u>2.4</u>	<u>0.3</u>	<u>0.6</u>	<u>1.9</u>	<u>10.6</u>	<u>5.2</u>	<u>14.6</u>	<u>1.2</u>
50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
100 to 249 employees.....	-	-	-	-	-	-	-	-	-	-
250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
1,000 to 4,499 employees.....	-	-	-	-	-	-	-	-	-	-
2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
Estabs. covered by admin. records ¹	24	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.2	0.4	(Z)
1213 Bituminous and lignite mining services n.e.c.:										
Establishments, total.....	115	1.4	10.4	1.3	2.8	9.6	21.7	10.8	29.3	3.3
Establishments with an average of-										
0 to 4 employees.....	64	0.1	0.4	0.1	0.1	0.4	1.4	0.9	2.0	0.4
5 to 9 employees.....	17	0.1	0.8	0.1	0.2	0.6	1.5	0.7	2.1	0.2
10 to 19 employees.....	16	0.2	1.5	0.2	0.5	1.4	3.2	1.8	4.4	0.6
20 to 49 employees.....	12	0.4	2.7	0.3	0.7	2.4	7.0	2.2	8.1	1.3
50 to 99 employees.....	5	<u>0.6</u>	<u>5.1</u>	<u>0.6</u>	<u>1.3</u>	<u>4.9</u>	<u>8.5</u>	<u>5.1</u>	<u>12.7</u>	<u>0.9</u>
100 to 249 employees.....	-	-	-	-	-	-	-	-	-	-
250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
Estabs. covered by admin. records ¹	47	(Z)	0.3	(Z)	0.1	0.3	0.9	0.6	1.4	0.1

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures shown above. - Represents zero. (Z) Less than 50 thousand or 50 employees.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls and sales for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1211	Bituminous coal.....1967..	2,897.5	2,878.3	1.8	2.9	14.4	2,576.8	2,576.0	0.8
	.....1963..	2,358.3	2,342.8	2.3	1.8	11.4	2,059.7	2,059.0	0.7
1212	Lignite.....1967..	17.9	17.7	(D)	(D)	-	¹ 17.7	¹ 17.7	-
	.....1963..	14.1	13.8	(D)	(D)	-	¹ 13.8	¹ 13.8	-
1213	Bituminous coal mining services, n.e.c..1967..	29.3	29.2	-	-	0.1	30.1	29.2	0.9
	.....1963..	24.0	23.0	-	0.5	0.4	23.2	23.0	0.2

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents gross shipments.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Geographic Area	Net coal shipments ¹		Raw coal shipped (including interplant transfers)		Prepared coal shipped (including interplant transfers)			
	Quantity (million short tons)	Value (million dollars)	Quantity (million short tons)	Value (million dollars)	Mechanically cleaned		Mechanically crushed, screened, or sized only	
					Quantity (million short tons)	Value (million dollars)	Quantity (million short tons)	Value (million dollars)
INDUSTRY 1211.--BITUMINOUS COAL	1967							
United States, total.....	545.1	2,576.8	161.2	599.2	346.5	1,806.2	117.9	474.6
Middle Atlantic (Pennsylvania).....	83.2	435.0	35.6	138.0	52.9	314.9	16.2	70.8
East North Central, total.....	(D)	(D)	25.0	79.3	87.9	356.3	29.7	104.3
Ohio.....	46.5	185.1	21.1	68.6	17.4	79.5	17.1	61.9
Indiana.....	19.5	75.5	1.0	3.8	16.5	64.3	2.0	7.4
Illinois.....	(D)	(D)	2.9	6.9	54.0	212.6	10.7	35.0
West North Central.....	5.9	24.8	0.3	1.3	² 5.5	² 23.5	(²)	(²)
South Atlantic, total.....	188.5	985.8	55.8	213.3	135.7	764.2	25.5	117.7
Maryland.....	35.8	176.9	0.6	2.5	-	-	0.7	3.2
Virginia.....		15.2	54.7	17.7	102.9	7.4	34.2	
West Virginia.....		40.0	156.1	118.1	661.2	17.4	80.2	
East South Central, total.....	117.8	523.3	40.7	144.5	60.3	305.2	32.5	129.8
Kentucky.....	94.9	380.2	33.4	115.2	49.2	217.3	26.2	94.8
Tennessee.....	22.8	143.0	7.3	29.3	11.1	87.9	3.5	15.2
Alabama.....							2.8	19.8
West South Central, total.....	1.1	6.6	0.2	0.9	² 0.9	² 5.4	(²)	(²)
Arkansas.....	0.2	1.6	0.2	0.9	² 0.9	² 5.4	(²)	(²)
Oklahoma.....	0.8	5.0						
Mountain, total.....	(D)	(D)	3.4	21.7	5.7	45.6	10.8	37.8
Montana.....	(D)	(D)	0.1	0.3	-	-	(D)	(D)
Wyoming.....	3.7	11.4	(D)	(D)	(D)	(D)	3.4	10.3
Colorado.....	5.7	32.3	(D)	(D)	(D)	(D)	3.2	14.7
New Mexico.....	(D)	(D)	0.1	0.2	(D)	(D)	(D)	(D)
Utah.....	(D)	(D)	(D)	(D)	3.4	30.8	(D)	(D)
Pacific.....	0.7	5.3	(Z)	(Z)	² 0.7	² 5.2	(²)	(²)
INDUSTRY 1212.--LIGNITE	³ 6.8	³ 17.7	0.3	0.8	-	-	6.5	16.9
INDUSTRY 1211.--BITUMINOUS COAL	1963							
United States.....	456.9	2,058.9	146.2	524.7	295.2	1,428.5	98.7	390.4
Middle Atlantic (Pennsylvania).....	72.3	367.1	28.6	112.9	44.8	255.4	16.8	66.9
East North Central, total.....	105.3	399.1	23.2	65.8	72.4	282.2	23.1	83.4
Ohio.....	38.1	143.7	16.0	47.0	14.6	59.2	15.9	58.6
Indiana.....	15.2	57.6	1.5	5.5	11.3	42.9	2.4	9.2
Illinois.....	52.1	197.9	5.6	13.3	46.5	180.1	4.9	15.6
West North Central.....	5.6	23.0	1.2	4.3	3.3	14.6	1.2	4.1
South Atlantic, total.....	163.8	780.3	53.6	200.9	117.3	589.6	23.4	97.4
Maryland.....	30.2	127.7	0.9	3.3	-	-	0.5	1.8
Virginia.....		15.4	52.9	15.6	70.9	7.4	30.8	
West Virginia.....		37.4	144.7	101.7	518.8	15.5	64.8	
East South Central, total.....	(NA)	(NA)	(NA)	(NA)	52.6	249.9	24.2	94.9
Kentucky.....	74.6	290.8	32.6	108.7	42.5	175.3	17.9	66.7
Tennessee.....	(NA)	(NA)	(NA)	(NA)	0.2	0.8	4.2	17.3
Alabama.....	(NA)	(NA)	2.0	9.9	10.0	73.8	2.0	10.9
West South Central, total.....	1.2	7.3	0.1	0.6	0.2	1.7	1.0	5.1
Arkansas.....	0.2	1.5	0.1	0.4	0.2	1.7	1.0	5.1
Oklahoma.....	1.0	5.8	(Z)	0.2				
Mountain, total.....	(NA)	(NA)	(NA)	(NA)	(D)	(D)	(D)	(D)
Montana.....	0.1	0.4	0.1	0.3	(D)	(D)	(Z)	0.2
Wyoming.....	3.1	8.9			(D)	(D)	3.1	8.4
Colorado.....	(NA)	(NA)			(NA)	(NA)	0.6	2.8	3.1	19.4
New Mexico.....	2.0	6.6	0.4	1.4	(D)	(D)	(D)	(D)
Utah.....	(NA)	(NA)	(NA)	(NA)	3.0	24.7	1.2	5.3
Pacific.....	1.1	7.4	(Z)	0.1	(D)	(D)	(D)	(D)
INDUSTRY 1212.--LIGNITE	³ 5.0	³ 13.8	0.4	1.2	-	-	4.6	12.6

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Service and geographic area	1967		1963	
		Raw coal mined (1,000 short tons)	Receipts for services (million dollars)	Raw coal mined (1,000 short tons)	Receipts for services (million dollars)
1213- --	BITUMINOUS COAL AND LIGNITE MINING SERVICES, TOTAL.....	4,934.8	30.1	6,614.0	23.2
12138 01	Exploration work, including geophysical and other exploratory surveying.....	(X)	(⁴)	(X)	1.7
12138 03	Drilling:				
12138 05	Prospect and test drilling.....	(X)	3.4	(X)	1.6
12138 07	Other drilling, including blasting.....	(X)		(X)	
12138 02	Sinking mine shafts and driving mine tunnels.....	(X)	9.6	(X)	(⁵)
12138 04	Stripping overburden.....	(X)	1.4	(X)	
12138 06	Strip mining coal not for own account.....	3,721.0	9.8	4,965.0	14.0
12138 09	Auger mining coal not for own account.....	1,249.8	3.0	1,649.0	4.2
	Other bituminous coal and lignite mining services.....	(X)	42.9	(X)	51.8
	Middle Atlantic (Pennsylvania), total.....	1,425.8	6.1	1,612.0	7.3
12138 04	Strip mining coal not for own account.....	1,190.4	3.0	1,404.0	(NA)
12138 06	Auger mining coal not for own account.....	235.4	0.5	208.0	0.4
	All other services.....	(X)	2.5	(X)	(NA)
	North Central.....	556.0	2.9	(NA)	(NA)
	South Atlantic, total.....	1,930.0	16.9	1,697.0	8.9
12138 04	Strip mining coal not for own account.....	1,465.5	5.3	740.0	(NA)
12138 06	Auger mining coal not for own account.....	464.5	1.4	957.0	2.5
	All other services.....	(X)	10.3	(X)	(NA)
	East South Central.....	(D)	1.0	640.0	1.9
	West South Central and West.....	(D)	3.1	(NA)	(NA)

Note: Detail may not add to total because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Represents less than one-half the unit of measure specified.

¹Represents gross shipments less coal received for preparation.²Figures for coal mechanically crushed, screened, or sized only are included with those for mechanically cleaned.³Represents gross shipments.⁴The value of receipts for exploration work is included in the value of other bituminous coal and lignite mining services.⁵The value of receipts for sinking mine shafts and driving mine tunnels is included in the value of other bituminous coal and lignite mining services.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL			
	UNITED STATES					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1,041.6	(X)	¹ 840.7
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons..	440.2	(X)	364.1	(X)
	Received from other establishments.....	..do.....	61.1	241.1	60.0	210.8
	Mined and prepared at the same establishment.....	..do.....	379.1	(X)	304.1	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	120.0	(X)	99.0	(X)
	Received from other establishments.....	..do.....	18.5	62.1	23.2	73.8
	Mined and prepared at the same establishments.....	..do.....	101.5	(X)	75.8	(X)
353011	Purchased machinery installed.....		(X)	259.0	(X)	190.8
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds...	(NA)	17.0	2249.1	221.4
289212	Ammonium nitrate.....	..do.....	335.1	13.6		
289214	Blasting accessories.....		(X)	9.2	(X)	(NA)
331201	Steel mill shapes and forms ³	1,000 s. tons...	(NA)	36.2	226.9	46.8
345210	Roof bolts.....	..do.....	^e 163.5	39.4		
241100	Round or hewn woods products and stumpage ⁴		(X)	20.5	(X)	16.5
970099	All other supplies used.....		(X)	277.4	(X)	¹ 232.6
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	66.1	(X)	48.0
	Fuels used, total.....		(X)	24.8	(X)	19.8
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons...	107.8	0.7	73.0	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel..	1,000 barrels....	2,577.2	13.9	2,044.0	10.8
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft...	1,615.8	0.6	972.0	0.4
291111	Gasoline.....	Million gals....	(NA)	4.5	22.2	5.8
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.5	(X)	1.0
977000	Undistributed fuels.....		(X)	4.6	(X)	1.5
121195	Coal from this mine or plant used at same establishment for power or heat.....	1,000 s. tons...	329.4	(X)	627.0	(X)
	Geographic Areas					
	MIDDLE ATLANTIC (PENNSYLVANIA)					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	220.6	(X)	167.6
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons..	66.6	(X)	56.5	(X)
	Received from other establishments.....	..do.....	19.8	82.1	15.6	60.7
	Mined and prepared at the same establishments.....	..do.....	46.8	(X)	40.9	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	17.8	(X)	16.1	(X)
	Received from other establishments.....	..do.....	1.7	6.6	2.4	7.4
	Mined and prepared at the same establishments.....	..do.....	16.1	(X)	13.7	(X)
353011	Purchased machinery installed.....		(X)	48.2	(X)	36.3
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds...	(NA)	1.2	23.7	2.2
289212	Ammonium nitrate.....	..do.....	49.3	1.9		
289214	Blasting accessories.....		(X)	0.6	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	38.6	7.3	45.0	8.9
345210	Roof bolts.....	..do.....	29.8	7.2		
241100	Round or hewn woods products and stumpage.....		(X)	4.9	(X)	2.9
970099	All other supplies used.....		(X)	52.4	(X)	39.7
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	8.2	(X)	9.5
	Fuels used, total.....		(X)	5.6	(X)	5.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons...	17.2	0.1	4.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel..	1,000 barrels....	688.5	3.5	586.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft...	548.4	0.3	425.0	0.2
291111	Gasoline.....	Million gals....	(NA)	1.1	5.4	1.4
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.2
977000	Undistributed fuels.....		(X)	0.5	(X)	0.4
121195	Coal from this mine or plant used at same establishment for power or heat.....	1,000 s. tons...	60.3	(X)	38.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>Geographic Areas--Continued</u>		INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	EAST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	166.1	(X)	155.5
121191	Raw coal for preparation:					
	For mechanical cleaning.....	Million s. tons.	(^S)	(X)	87.4	(X)
	Received from other establishments.....	..do.....	(^S)	(^S)	10.8	24.1
	Mined and prepared at the same establishment.....	..do.....	(^S)	(X)	76.6	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	^S 137.8	(X)	22.3	(X)
	Received from other establishments.....	..do.....	^S 11.6	^S 30.2	2.6	8.2
	Mined and prepared at the same establishments.....	..do.....	^S 126.1	(X)	19.7	(X)
353011	Purchased machinery installed.....		(X)	36.8	(X)	53.0
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	3.0	95.2	5.4
289212	Ammonium nitrate.....	..do.....	148.7	6.3		
289214	Blasting accessories.....		(X)	3.6	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	40.2	7.0	37.2	7.7
345210	Roof bolts.....	..do.....	13.8	3.7		
241100	Round or hewn woods products and stumpage.....		(X)	1.7	(X)	1.2
970099	All other supplies used.....		(X)	66.4	(X)	51.1
976000	Selected supplies, minerals received for preparation and purchased machinery installed, n.s.k.....		(X)	7.4	(X)	4.7
	Fuels used, total.....		(X)	6.6	(X)	5.3
121005	Coal- bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	4.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	788.7	4.0	656.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	78.0	(NA)
291111	Gasoline.....	Million gals....	(NA)	1.4	6.1	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.2	(X)	0.2
977000	Undistributed fuels.....		(X)	1.0	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	17.7	(X)	120.0	(X)
	Ohio					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	79.5	(X)	70.9
121191	Raw coal for preparation:					
	For mechanical cleaning.....	Million s. tons.	(^S)	(X)	(^S)	(X)
	Received from other establishments.....	..do.....	(^S)	(^S)	(^S)	(^S)
	Mined and prepared at the same establishment.....	..do.....	(^S)	(X)	11.9	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	^S 38.4	(X)	^S 20.3	(X)
	Received from other establishments.....	..do.....	^S 9.1	^S 24.9	^S 8.4	^S 21.2
	Mined and prepared at the same establishments.....	..do.....	^S 29.2	(X)	12.7	(X)
353011	Purchased machinery installed.....		(X)	16.5	(X)	18.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.5	37.8	2.0
289212	Ammonium nitrate.....	..do.....	84.4	3.5		
289214	Blasting accessories.....		(X)	1.5	(X)	-
331201	Steel mill shapes and forms.....	1,000 short tons	19.4	2.8	11.3	2.2
345210	Roof bolts.....	..do.....	5.0	1.2		
241100	Round or hewn woods products and stumpage.....		(X)	0.7	(X)	0.6
970099	All other supplies used.....		(X)	25.8	(X)	22.6
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	2.1	(X)	3.4
	Fuels used, total.....		(X)	3.8	(X)	3.3
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	4.0	(X)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	414.6	2.1	40.5	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	70.0	(Z)
291111	Gasoline.....	Million gals....	(NA)	0.9	3.7	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.2
977000	Undistributed fuels.....		(X)	0.6	(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	1.1	(X)	52.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Geographic Areas--Continued					
	EAST NORTH CENTRAL DIVISION--Continued					
	Indiana					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	17.8	(X)	18.7
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	20.2	(X)	13.9	(X)
	Mined and prepared at the same establishment.....	..do.....	20.2	(X)	13.9	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	1.9	(X)	2.3	(X)
	Mined and prepared at the same establishments.....	..do.....	1.9	(X)	2.3	(X)
353100	Purchased machinery installed.....		(X)	6.0	(X)	10.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	(D)		
289212	Ammonium nitrate.....	..do.....	(D)	(D)	30.3	1.3
289214	Blasting accessories.....		(X)	(D)	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(D)	(D)		
345210	Roof bolts.....	..do.....	(D)	(D)	2.6	0.7
241100	Round or hewn woods products and stumpage.....		(X)	-	(X)	0.1
970099	All other supplies used.....		(X)	10.9	(X)	5.5
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.9	(X)	0.6
	Fuels used, total.....		(X)	0.8	(X)	0.5
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels... }	95.7	0.5	66.0	0.4
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gals...	0.5	0.1	0.6	0.1
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....		(X)	(D)	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.2	(X)	-
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	3.0	(X)	38.0	(X)
	Illinois					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	68.8	(X)	65.9
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	(D)	(X)	655.7	(X)
	Received from other establishments.....	..do.....	(D)	(D)	64.9	611.2
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	50.8	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	(D)	(X)	(6)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(6)	(6)
	Mined and prepared at the same establishments.....	..do.....	(D)	(X)	4.8	(X)
353011	Purchased machinery installed.....		(X)	14.3	(X)	23.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	1.1		
289212	Ammonium nitrate.....	..do.....	43.0	2.0	27.0	2.0
289214	Blasting accessories.....		(X)	1.1	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	17.8	3.4		
345210	Roof bolts.....	..do.....	8.5	2.4	22.5	4.8
241100	Round or hewn woods products and stumpage.....		(X)	1.0	(X)	0.6
970099	All other supplies used.....		(X)	39.0	(X)	23.0
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	4.5	(X)	0.6
	Fuels used, total.....		(X)	2.1	(X)	1.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons...	(D)	(D)	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	278.3	1.4	185.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	-	-	8.0	0.3
291111	Gasoline.....	Million gals...	2.5	0.4	1.8	0.4
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....				(X)	(Z)
977000	Undistributed fuels.....		(X)	1.3	(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons...	13.6	(X)	30.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Geographic Areas--Continued		INDUSTRY 1211.--BITUMINOUS COAL--CON.			
	WEST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	5.3	(X)	10.3
121191	Raw coal for preparation:					
	For mechanical cleaning.....	Million s. tons.	4.5	(X)	4.7	(X)
	Mined and prepared at the same establishment.....	..do.....	4.5	(X)	4.7	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	2.2	(X)	1.1	(X)
	Mined and prepared at the same establishments.....	..do.....	2.2	(X)	1.1	(X)
353011	Purchased machinery installed.....	.....	(X)	1.5	(X)	7.8
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	6.5	0.4
289212	Ammonium nitrate.....	..do.....	13.0	0.5		
289214	Blasting accessories.....	.....	(X)	0.7	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 sh. tons..	1.3	0.3	0.7	0.2
345210	Roof bolts.....	..do.....	(D)	(D)		
241100	Round or hewn woods products and stumpage.....	.....	(X)	(Z)	(X)	(Z)
970099	All other supplies used.....	.....	(X)	2.0	(X)	1.6
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	0.2	(X)	0.3
	Fuels used, total.....	.....	(X)	0.4	(X)	0.5
121005	Coal-bituminous, lignite, and anthracite.....	1,000 sh. tons..	(D)	(D)	-	-
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels..	48.6	0.2	56.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels..				
291111	Gasoline.....	Million gallons.	(NA)	0.1	0.5	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....	.....	(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....	.....	(X)	0.1	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 sh. tons..	-	(X)	1.0	(X)
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	395.5	(X)	299.7
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million sh. tons	174.4	(X)	144.0	(X)
	Received from other establishments.....	..do.....	22.7	88.3	21.6	77.7
	Mined and prepared at the same establishment.....	..do.....	151.7	(X)	122.4	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	26.3	(X)	23.6	(X)
	Received from other establishments.....	..do.....	5.8	21.1	9.0	29.9
	Mined and prepared at the same establishments.....	..do.....	20.5	(X)	14.6	(X)
353011	Purchased machinery installed.....	.....	(X)	108.8	(X)	46.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	7.0	39.2	6.6
289212	Ammonium nitrate.....	..do.....	23.1	1.0		
289214	Blasting accessories.....	.....	(X)	1.7	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 sh. tons..	69.0	12.3	101.7	21.5
345210	Roof bolts.....	..do.....	82.0	19.0		
241100	Round or hewn woods products and stumpage.....	.....	(X)	10.5	(X)	9.9
970099	All other supplies used.....	.....	(X)	100.4	(X)	90.0
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	25.4	(X)	17.5
	Fuels used, total.....	.....	(X)	5.8	(X)	4.1
121005	Coal-bituminous, lignite, and anthracite.....	1,000 sh. tons..	(D)	(D)	61.0	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels..	401.5	2.5	360.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels..				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	351.3	0.1	324.0	0.2
291111	Gasoline.....	Million gallons.	(NA)	0.9	5.3	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....	.....	(X)	0.7	(X)	0.2
977000	Undistributed fuels.....	.....	(X)	1.6	(X)	0.3
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 sh. tons..	219.0	(X)	376.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Geographic Areas--Continued					
	SOUTH ATLANTIC DIVISION--Continued					
	Maryland					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.5	(X)	(D)
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	..do.....	0.6	(X)	(?)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(?)	(?)
	Mined and prepared at the same establishments.....	..do.....	(D)	(X)	(D)	(X)
353100	Purchased machinery installed.....		(X)	0.2	(X)	0.5
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	}	0.2
289212	Ammonium nitrate.....	..do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	(D)		
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	(D)	-	-
345210	Roof bolts.....		(D)	(D)	-	-
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	(Z)
970099	All other supplies used.....		(X)	0.9	(X)	(D)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.3	(X)	0.2
	Fuels used, total.....		(X)	0.3	(X)	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	}	22.8	0.1	15.0
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel...	1,000 barrels...				
291111	Gasoline.....	Million gal....	0.2	(Z)	0.3	0.1
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....		(X)	(D)	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.2	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	-	(X)	(Z)	(X)
	Virginia					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	72.5	(X)	(D)
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	22.8	(X)	19.3	(X)
	Received from other establishments.....	..do.....	4.2	14.2	5.1	17.1
	Mined and prepared at the same establishment.....	..do.....	18.6	(X)	14.2	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	7.2	(X)	77.0	(X)
	Received from other establishments.....	..do.....	(D)	(D)	74.5	714.8
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	2.5	(X)
353011	Purchased machinery installed.....		(X)	19.5	(X)	6.1
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	2.0	}	11.9
289212	Ammonium nitrate.....	..do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	(D)		
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	(D)	}	18.8
345210	Roof bolts.....	..do.....	(D)	(D)		
241100	Round or hewn woods products and stumpage.....		(X)	(D)		
970099	All other supplies used.....		(X)	28.4	(X)	(D)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	8.4	(X)	4.0
	Fuels, used, total.....		(X)	0.8	(X)	0.5
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	(Z)	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	}	40.5	0.2	51.0
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel...	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gal....	0.2	0.1	0.6	(NA)
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....		(X)	(D)	(X)	0.1
977000	Undistributed fuels.....		(X)	0.5	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons...	112.7	(X)	238.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Geographic Areas--Continued					
	SOUTH ATLANTIC DIVISION--Continued					
	West Virginia					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	321.5	(X)	240.1
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	151.6	(X)	124.7	(X)
	Received from other establishments.....	..do.....	18.5	74.1	16.5	60.6
	Mined and prepared at the same establishment.....	..do.....	133.1	(X)	108.2	(X)
121193	For mechanical crushing, screening or sizing only.....	..do.....	18.5	(X)	16.2	(X)
	Received from other establishments.....	..do.....	4.2	14.7	4.5	15.1
	Mined and prepared at the same establishments.....	..do.....	14.3	(X)	11.7	(X)
353011	Purchased machinery installed.....	.....	(X)	89.1	(X)	40.0
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	4.9	27.1	4.7
289212	Ammonium nitrate.....	..do.....	20.4	0.8		
289214	Blasting accessories.....	.....	(X)	1.5	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	11.0	82.9	19.5
345210	Roof bolts.....	..do.....	65.5	15.7		
241100	Round or hewn woods products and stumpage.....	.....	(X)	9.6	(X)	9.0
970099	All other supplies used.....	.....	(X)	83.1	(X)	77.9
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	17.0	(X)	13.3
	Fuel used, total.....	.....	(X)	4.7	(X)	3.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	61.0	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	338.3	2.2	294.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel...	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft.	(D)	(D)	324.0	0.2
291111	Gasoline.....	Million gals....	(NA)	0.8	4.4	(NA)
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....	.....	(X)	1.7	(X)	0.3
977000	Undistributed fuels.....	.....			
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	106.2	(X)	138.0	(X)
	EAST SOUTH CENTRAL					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	216.1	(X)	(D)
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	78.3	(X)	65.5	(X)
	Received from other establishments.....	..do.....	7.4	28.5	(8)	(D)
	Mined and prepared at the same establishment.....	..do.....	70.9	(X)	65.5	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	32.3	(X)	24.6	(X)
	Received from other establishments.....	..do.....	8.3	27.7	9.2	28.2
	Mined and prepared at the same establishments.....	..do.....	24.0	(X)	15.4	(X)
353011	Purchased machinery installed.....	.....	(X)	56.5	(X)	41.5
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	5.3	72.7	6.0
289212	Ammonium nitrate.....	..do.....	87.2	3.4		
289214	Blasting accessories.....	.....	(X)	2.5	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	7.8	29.5	6.3
345210	Roof bolts.....	..do.....	31.4	8.0		
241100	Round or hewn woods products and stumpage.....	.....	(X)	3.0	(X)	1.9
970099	All other supplies used.....	.....	(X)	49.6	(X)	41.2
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	23.8	(X)	14.3
	Fuels used, total.....	.....	(X)	5.4	(X)	3.7
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons..	(D)	(D)	3.0	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	547.6	2.9	30.9	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel...	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft.	449.0	0.1	135.0	0.1
291111	Gasoline.....	Million gal....	(NA)	0.8	4.0	(NA)
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....	.....	(X)	1.7	(X)	0.3
977000	Undistributed fuels.....	.....			
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons..	6.1	(X)	67.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	<u>Geographic Areas--Continued</u>					
	EAST SOUTH CENTRAL DIVISION--Continued					
	Kentucky					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	167.7	(X)	142.5
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	60.3	(X)	50.2	(X)
	Received from other establishments.....	..do.....	6.4	23.1	9.6	33.3
	Mined and prepared at the same establishment.....	..do.....	53.9	(X)	40.6	(D)
121193	For mechanical crushing screening, or sizing only.....	..do.....	26.0	(X)	18.4	(X)
	Received from other establishments.....	..do.....	7.5	24.0	8.8	26.7
	Mined and prepared at the same establishment.....	..do.....	18.5	(X)	9.6	(X)
353011	Purchased machinery installed.....		(X)	40.6	(X)	34.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	3.7	56.6	4.3
289212	Ammonium nitrate.....	..do.....	48.3	1.8		
289214	Blasting accessories.....		(X)	1.5	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	7.2	17.7	4.6
345210	Roof bolts.....	..do.....	24.3	6.3		
241100	Round or hewn woods products and stumpage.....		(X)	1.8	(X)	1.3
970099	All other supplies used.....		(X)	37.7	(X)	27.9
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	20.0	(X)	9.5
	Fuel used, total.....		(X)	3.4	(X)	2.3
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons..	(D)	(D)	2.0	(Z)
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels..	324.4	1.7	218.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	..do.....				
131300	Gas-natural, manufactured and mixed.....	Million cu. ft..	(D)	(D)	54.0	(Z)
291111	Gasoline.....	Million gal....	(NA)	0.6	2.8	0.8
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.1
977000	Undistributed fuels.....		(X)	1.0	(X)	0.3
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons..	(D)	(X)	65.0	(X)
	Tennessee					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	13.6	(X)	(D)
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	0.8	(X)	0.2	(X)
	Received from other establishments.....	..do.....	⁽⁸⁾ 0.8	(D)	⁽⁸⁾ 0.2	(D)
	Mined and prepared at the same establishment.....	..do.....	⁽⁸⁾ 0.8	(X)	⁽⁸⁾ 0.2	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	3.5	(X)	4.3	(X)
	Received from other establishments.....	..do.....	0.9	3.8	0.4	1.5
	Mined and prepared at the same establishment.....	..do.....	2.6	(X)	3.9	(X)
353011	Purchased machinery installed.....		(X)	4.9	(X)	3.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.3	1.5	0.2
289212	Ammonium nitrate.....	..do.....	1.9	0.1		
289214	Blasting accessories.....		(X)	0.1	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	(Z)	0.5	0.1
345210	Roof bolts.....	..do.....	1.7	0.3		
241100	Round or hewn woods products and stumpage.....		(X)	0.1	(X)	0.1
970099	All other supplies used.....		(X)	2.1	(X)	1.0
97600	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	1.9	(X)	2.5
	Fuels used, total.....		(X)	0.4	(X)	0.6
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons..	-	-	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels..	26.0	0.1	40.0	0.2
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel..	1,000 barrels..				
291111	Gasoline.....	Million gal....	0.1	(Z)	0.3	0.1
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.1
977000	Undistributed fuels.....		(X)	0.2	(X)	0.1

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Geographic Areas--Continued		INDUSTRY 1211.--BITUMINOUS COAL--CON.			
	EAST SOUTH CENTRAL DIVISION--CONTINUED					
	ALABAMA					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	34.7	(X)	(D)
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons..	17.3	(X)	15.1	(X)
	Received from other establishments.....	..do.....	(⁸)	(D)	(⁸)	(D)
	Mined and prepared at the same establishment.....	..do.....	⁸ 17.3	(X)	⁸ 15.1	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	9.3	(X)	2.0	(X)
	Received from other establishments.....	..do.....	6.4	(Z)	-	-
	Mined and prepared at the same establishments.....	..do.....	2.9	(X)	2.0	(X)
353011	Purchased machinery installed.....		(X)	11.0	(X)	4.1
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds...	(NA)	1.3	14.6	1.5
289212	Ammonium nitrate.....	..do.....	37.1	1.5		
289214	Blasting accessories.....		(X)	0.9	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	0.7	11.3	1.6
345210	Roof bolts.....	..do.....	5.4	1.4		
241100	Round or hewn woods products and stumpage.....		(X)	1.1	(X)	0.5
970099	All other supplies used.....		(X)	15.1	(X)	12.4
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	1.7	(X)	2.2
	Fuels used, total.....		(X)	1.6	(X)	0.8
121005	Coal-bituminous, lignite, and anthracite.....	1,000 sh. tons...	(D)	(D)	1.0	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels....	197.2	1.0	51.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft...	(D)	(D)	81.0	(Z)
291111	Gasoline.....	Million gallons..	(NA)	0.2	0.8	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.2	(X)	0.1
977000	Undistributed fuels.....		(X)	0.2	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 sh. tons...	(D)	(X)	2.0	(X)
	WEST SOUTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.8	(X)	1.9
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million sh. tons	(D)	(X)	0.2	(X)
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	0.2	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	1.0	(X)	1.0	(X)
	Mined and prepared at the same establishments.....	..do.....	1.0	(X)	1.0	(X)
353011	Purchased machinery installed.....		(X)	(D)	(X)	0.7
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	(NA)	3.9	0.2
289212	Ammonium nitrate.....	..do.....	5.2	0.2		
289214	Blasting accessories.....		(X)		(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 sh. tons..	(NA)		0.5	0.1
345210	Roof bolts.....	..do.....				
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	(Z)
970099	All other supplies used.....		(X)	1.4	(X)	0.8
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.2	(X)	0.1
	Fuels used, total.....		(X)	0.2	(X)	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels....	19.6	0.1	13.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels....				
291111	Gasoline.....	Million gallons..	0.2	(Z)	0.2	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	-	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.1	(X)	0.1

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Geographic Areas--Continued		INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	WEST REGION					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	36.3	(X)	(D)
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	7.2	(X)	5.9	(X)
	Received from other establishments.....	..do.....	⁽⁸⁾	(D)	⁽⁸⁾	(D)
	Mined and prepared at the same establishment.....	..do.....	⁸ 7.2	(X)	⁸ 5.9	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	11.6	(X)	⁸ 12.2	(X)
	Received from other establishments.....	..do.....	0.3	⁽⁸⁾	⁽⁸⁾	(D)
	Mined and prepared at the same establishment.....	..do.....	11.3	(X)	⁸ 12.2	(X)
353011	Purchased machinery installed.....		(X)	6.6	(X)	4.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.3	7.9	0.6
289212	Ammonium nitrate.....	..do.....	8.5	0.3		
289214	Blasting accessories.....		(X)	0.2	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	1.4	12.4	2.2
345210	Roof bolts.....	..do.....	6.5	1.4		
241100	Round or hewn woods products and stumpage.....		(X)	0.5	(X)	0.5
970099	All other supplies used.....		(X)	24.9	(X)	(D)
976000	Selected supplies, minerals received for preparation and purchased machinery installed, n.s.k.....		(X)	0.7	(X)	1.6
	Fuels used, total.....		(X)	0.8	(X)	0.6
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons...	1.3	(Z)	1.0	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	82.6	0.6	64.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	10.0	(Z)	10.0	(Z)
291111	Gasoline.....	Million gal....	(NA)	0.1	0.7	0.2
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.1	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons...	26.3	(X)	25.0	(X)
	Colorado					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.6	(X)	5.1
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	1.8	(X)	0.7	(X)
	Received from other establishments.....	..do.....	-	-	-	-
	Mined and prepared at the same establishment.....	..do.....	1.8	(X)	0.7	(X)
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	3.2	(X)	3.1	(X)
	Received from other establishments.....	..do.....	0.1	(Z)	-	-
	Mined and prepared at the same establishments.....	..do.....	3.1	(X)	3.1	(X)
353011	Purchased machinery installed.....		(X)	1.9	(X)	1.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	2.4	0.2
289212	Ammonium nitrate.....	..do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	(D)	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	0.7	6.1	0.9
345210	Roof bolts.....	..do.....	4.3	0.9		
241100	Round or hewn woods products and stumpage.....		(X)	0.2	(X)	0.2
970099	All other supplies used.....		(X)	1.7	(X)	1.9
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.1	(X)	0.3
	Fuels used, total.....		(X)	0.2	(X)	0.1
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons...	-	-	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	18.6	0.1	6.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	-	-	3.0	(Z)
291111	Gasoline.....	Million gal....	(NA)	(Z)	0.1	(Z)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(Z)
977000	Undistributed fuels.....				(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	(D)	(X)	7.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Geographic Areas--Continued		INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	WEST REGION--Continued					
	Utah					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	25.1	(X)	(D)
121191	Raw coal for preparation:					
	For mechanical cleaning.....	Million s. tons.	3.8	(X)	3.6	(X)
	Received from other establishments.....	..do.....	⁽⁸⁾	(D)	⁽⁸⁾	(D)
	Mined and prepared at the same establishment.....	..do.....	⁸ 3.8	(X)	⁸ 3.6	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	1.4	(X)	⁸ 2.4	(X)
	Received from other establishments.....	..do.....	0.1	(Z)	⁽⁸⁾	(D)
	Mined and prepared at the same establishment.....	..do.....	1.3	(X)	⁸ 2.4	(X)
353011	Purchased machinery installed.....	.....	(X)	1.8	(X)	1.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	}	0.6
289212	Ammonium nitrate.....	..do.....	-	-		
289214	Blasting accessories.....	.....	(X)	0.1		
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	0.4	}	(NA)
345210	Roof bolts.....	..do.....	1.7	0.4		
241100	Round or hewn woods products and stumpage.....	.....	(X)	0.2		
970099	All other supplies used.....	.....	(X)	21.9	(X)	0.2
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	0.2	(X)	(D)
	Fuels used, total.....	.....	(X)	0.1	(X)	0.8
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	-	-	(Z)	0.1
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	}	8.7	(Z)	13.0
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
291111	Gasoline.....	Million gal.....	(NA)	(Z)	0.2	1.0
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....	.....	}	(X)	0.1	(Z)
977000	Undistributed fuels.....	.....			
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	21.8	(X)	10.0	(X)
	Type of Operation					
	Producing Establishments					
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	1,038.5	(X)	1,835.3
121191	Raw coal for preparation:					
	For mechanical cleaning.....	Million s. tons.	440.2	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	61.1	241.1	(NA)	228.2
	Mined and prepared at the same establishment.....	..do.....	379.1	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	120.0	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	18.5	62.1	(NA)	56.4
	Mined and prepared at the same establishment.....	..do.....	101.5	(X)	(NA)	(X)
353011	Purchased machinery installed.....	.....	(X)	256.1	(X)	185.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	17.0	}	249.1
289212	Ammonium nitrate.....	..do.....	335.1	13.6		
289214	Blasting accessories.....	.....	(X)	9.2		
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	36.2	}	(NA)
345210	Roof bolts.....	..do.....	163.5	39.4		
241100	Round or hewn woods products and stumpage.....	.....	(X)	20.5		
970099	All other supplies used.....	.....	(X)	277.4	(X)	46.8
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	65.9	(X)	16.5
	Fuels used, total.....	.....	(X)	24.8	(X)	¹ 232.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	107.8	0.7	73.0	19.8
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	}	2,577.2	13.9	2,043.0
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft.	1,615.8	0.6	972.0	(NA)
291111	Gasoline.....	Million gal.....	(NA)	4.5	22.2	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....	.....	(X)	0.5	(X)	1.0
977000	Undistributed fuels.....	.....	(X)	4.6	(X)	1.4
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	329.4	(X)	627.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Type of Operation--Continued		INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Mines Only					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	154.8	(X)	127.3
353011	Purchased machinery installed.....		(X)	41.2	(X)	42.1
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	3.0	57.3	4.8
289212	Ammonium nitrate.....	..do.....	84.5	3.4		
289214	Blasting accessories.....		(X)	0.7	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	3.9	28.2	6.0
345210	Roof bolts.....	..do.....	24.0	5.9		
241100	Round or hewn woods products and stumpage.....		(X)	3.7	(X)	2.9
970099	All other supplies used.....		(X)	45.4	(X)	39.7
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	47.6	(X)	31.8
	Fuels used, total.....		(X)	7.8	(X)	7.3
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons..	7.9	0.1	64.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1,2,4, and light diesel fuel...	1,000 barrels...	664.6	3.6	675.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	402.7	0.1	184.0	(NA)
291111	Gasoline.....	Million gal....	0.3	1.3	7.8	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.2	(X)	0.4
977000	Undistributed fuels.....		(X)	2.5	(X)	1.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons..	51.3	(X)	277.0	(X)
	STRIP PIT					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	21.4	(X)	31.1
353011	Purchased machinery installed.....		(X)	6.3	(X)	11.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.8	33.7	2.0
289212	Ammonium nitrate.....	..do.....	73.9	3.0		
289214	Blasting accessories.....		(X)	0.3	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	1.0	2.3	0.4
345210	Roof bolts.....	..do.....	(D)	(D)		
241100	Round or hewn woods products and stumpage.....		(X)	0.1	(X)	(Z)
970099	All other supplies used.....		(X)	9.3	(X)	10.9
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.6	(X)	5.8
	Fuels used, total.....		(X)	3.6	(X)	4.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 s. tons..	-	-	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light) grade numbers 1,2,4, and light diesel fuel...	1,000 barrels...	437.8	2.3	444.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	-	-	103.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	0.7	5.0	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.1
977000	Undistributed fuels.....		(X)	0.5	(X)	0.6
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons..	(D)	(X)	20.0	(X)
	UNDERGROUND					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	122.0	(X)	80.3
353011	Purchased machinery installed.....		(X)	29.9	(X)	23.8
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	1.8	11.4	2.0
289212	Ammonium nitrate.....	..do.....	1.2	(Z)		
289214	Blasting accessories.....		(X)	0.3	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	2.9	25.3	5.4
345210	Roof bolts.....	..do.....	23.9	5.9		
241100	Round or hewn woods products and stumpage.....		(X)	3.6	(X)	2.6
970099	All other supplies used.....		(X)	32.8	(X)	23.7
976000	Selected supplies, minerals received for preparation and purchased machinery installed, n.s.k.....		(X)	44.8	(X)	22.8

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
INDUSTRY 1211.--BITUMINOUS COAL--Continued						
Type of Operation--Continued						
Mines Only--Continued						
Underground--Continued						
	Fuels used, total.....		(X)	2.8	(X)	1.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	2.2	(Z)	64.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	73.1	0.4	80.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	72.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	0.3	1.8	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	0.3
977000	Undistributed fuels.....		(X)	2.0	(X)	0.1
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 s. tons...	51.2	(X)	257.0	(X)
Combination and other						
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	11.3	(X)	15.9
353011	Purchased machinery installed.....		(X)	3.8	(X)	6.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.5	12.2	0.8
289212	Ammonium nitrate.....	..do.....	9.3	0.4		
289214	Blasting accessories.....		(X)	0.1	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	(Z)	0.7	0.2
345210	Roof bolts.....	..do.....	-	-		
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	0.2
970099	All other supplies used.....		(X)	3.3	(X)	5.1
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	3.3	(X)	3.2
	Fuels used, total.....		(X)	1.4	(X)	1.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	-	-
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	152.6	0.9	151.0	(NA)
291142	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	9.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	0.2	1.0	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.2	(X)	0.3
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	-	(X)	(Z)	(X)
Mines With Preparation Plants						
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	641.0	(X)	479.1
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	393.0	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	14.3	52.3	(NA)	55.6
	Mined and prepared at the same establishment.....	..do.....	378.7	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	105.0	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	5.1	14.8	(NA)	13.1
	Mined and prepared at the same establishment.....	..do.....	99.9	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	210.0	(X)	138.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	13.9	191.6	16.6
289212	Ammonium nitrate.....	..do.....	249.9	10.2		
289214	Blasting accessories.....		(X)	8.4	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	31.5	195.5	40.4
345210	Roof bolts.....	..do.....	139.3	33.4		
241100	Round or hewn woods products and stumpage.....		(X)	16.8	(X)	13.6
970099	All other supplies used.....		(X)	230.8	(X)	186.0
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	18.9	(X)	13.9

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Type of Operation--Continued					
	Mines With Preparation Plants--Continued					
	Fuels used, total.....		(X)	16.0	(X)	12.0
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	18.7	0.1	9.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	1,864.2	10.0	1,337.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	1,126.2	0.5	739.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	3.2	13.9	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.3	(X)	0.6
977000	Undistributed fuels.....		(X)	1.8	(X)	0.2
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	262.5	(X)	294.0	(X)
	With Mechanical Cleaning					
	Strip Pit					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	88.4	(X)	84.4
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	90.5	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	(*)	(D)	(NA)	11.2
	Mined and prepared at the same establishment.....	..do.....	*90.5	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	3.6	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	-	-	-	-
	Mined and prepared at the same establishment.....	..do.....	3.6	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	33.7	(X)	39.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	3.4	87.3	5.0
289212	Ammonium nitrate.....	..do.....	97.6	4.2		
289214	Blasting accessories.....		(X)	3.3	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	3.3	7.9	2.3
345210	Roof bolts.....	..do.....	-	-		
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	0.1
970099	All other supplies used.....		(X)	39.6	(X)	25.5
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.9	(X)	1.1
	Fuels used, total.....		(X)	4.7	(X)	3.1
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	-	-	3.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.	1,000 barrels...	638.8	3.4	44.5	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	1,000 barrels...				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	25.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	0.9	3.0	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	0.4	(X)	-
977000	Undistributed fuels.....				(X)	-
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	-	(X)	33.0	(X)
	Underground					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	394.5	(X)	265.6
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	264.0	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(NA)	37.6
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	12.4	(X)	(X)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(X)	(X)
	Mined and prepared at the same establishments.....	..do.....	(D)	(X)	(X)	(X)
353011	Purchased machinery installed.....		(X)	130.1	(X)	58.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	6.8	27.9	5.4
289212	Ammonium nitrate.....	..do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	2.0	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	21.7	151.1	31.6
345210	Roof bolts.....	..do.....	117.2	27.7		
241100	Round or hewn woods products and stumpage.....		(X)	13.6	(X)	11.2
970099	All other supplies used.....		(X)	173.9	(X)	115.6
976000	Selected supplies, minerals received for preparation and purchased machinery installed, n.s.k.....		(X)	18.7	(X)	6.0

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
INDUSTRY 1211.--BITUMINOUS COAL--Continued						
Type of Operation--Continued						
Mines with Preparation Plants--Continued						
With mechanical cleaning--Continued						
Underground--Continued						
	Fuel used, total.....		(X)	1.9	(X)	1.4
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	3.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	} 152.7	0.8	89.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	611.0	(NA)
291111	Gasoline.....	Million gal....	(NA)	0.4	2.0	(NA)
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....		} (X)	0.6 {	(X)	0.2
977000	Undistributed fuels.....				(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	161.1	(X)	169.0	(X)
Strip Pit and Underground						
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	13.1	(X)	18.7
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	14.9	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	1.0	3.9	(NA)	1.2
	Mined and prepared at the same establishment.....	..do.....	13.9	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	2.7	(X)	-	(X)
	Received from other establishments.....	..do.....	-	-	-	-
	Mined and prepared at the same establishments.....	..do.....	2.7	(X)	-	(X)
353011	Purchased machinery installed.....		(X)	2.6	(X)	6.3
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	(D)	} 12.3	1.0
289212	Ammonium nitrate.....	..do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	(D)	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	1.4	} 4.0	1.0
345210	Roof bolts.....	..do.....	0.5	0.2		
241100	Round or hewn woods products and stumpage.....		(X)	0.1	(X)	0.7
970099	All other supplies used.....		(X)	4.7	(X)	8.3
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.2	(X)	0.2
	Fuels used, total.....		(X)	0.6	(X)	0.4
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel.....	1,000 barrels...	} (D)	(D)	36.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	..do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	-	-	19.0	(NA)
291111	Gasoline.....	Million gal....	(D)	(D)	0.5	(NA)
960018	Other fuels liquefied petroleum gas, coke, wood, and other.....		} (X)	0.6 {	(X)	(Z)
977000	Undistributed fuels.....				(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	-	(X)	2.0	(X)
Strip Pit and Auger						
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.2	(X)	10.3
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million sh. tons	3.7	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(NA)	5.7
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	..do.....	0.6	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	-	-	(NA)	(NA)
	Mined and prepared at the same establishments.....	..do.....	0.6	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	1.0	(X)	1.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	} 4.8	0.4
289212	Ammonium nitrate.....	..do.....	15.6	0.6		
289214	Blasting accessories.....		(X)	0.5	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	0.4	} 0.9	0.2
345210	Roof bolts.....	..do.....	-	-		
970099	All other supplies used.....		(X)	2.7	(X)	1.7
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	-	(X)	0.7

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Type of operation--Continued					
	Mines with Preparation Plants--Continued					
	With mechanical cleaning--Continued					
	Strip Pit and Auger--Continued					
	Fuels used, total.....		(X)	0.5	(X)	0.7
121005	Coal-bituminous, lignite, and anthracite.....	1,000 short tons	(D)	(D)	3.0	(NA)
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel..	1,000 barrels...	55.8	0.4	83.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	...do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	7.0	(NA)
291111	Gasoline.....	Million gal....	0.5	0.1	0.9	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....		(X)	-	(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	(D)	(X)	1.0	(X)
	Other Combinations, Auger only, and Dredge					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	18.6	(X)	16.3
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	19.3	(X)	(NA)	(X)
	Received from other establishments.....	...do.....	0.8	1.9	(NA)	(Z)
	Mined and prepared at the same establishment.....	...do.....	18.5	(X)	(NA)	(X)
121193	For mechanical crushing, screening, or sizing only.....	...do.....	0.8	(X)	-	(X)
	Received from other establishments.....	...do.....	-	-	-	-
	Mined and prepared at the same establishments.....	...do.....	0.8	(X)	-	(X)
353011	Purchased machinery installed.....		(X)	5.4	(X)	3.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.7	13.1	1.4
289212	Ammonium nitrate.....	...do.....	5.8	0.2		
289214	Blasting accessories.....		(X)	0.4	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	0.9	15.2	2.1
345210	Roof bolts.....	...do.....	6.4	1.7		
241100	Round or hewn woods products and stumpage.....		(X)	0.8	(X)	0.6
970099	All other supplies used.....		(X)	6.4	(X)	8.5
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.2	(X)	0.3
	Fuels used, total.....		(X)	0.5	(X)	0.2
	Fuel oil:					
291141	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel..	1,000 barrels...	81.4	0.4	31.0	(NA)
291151	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel....	...do.....				
131300	Gas-natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gal....	0.4	0.1	0.3	(NA)
960018	Other fuels-liquefied petroleum gas, coke, wood, and other.....		(X)	(Z)	(X)	(Z)
977000	Undistributed fuels.....		(X)	(Z)	(X)	(Z)
121195	Coal from this mine or plant used at this establishment for power or heat.....	1,000 short tons	2.1	(X)	16.0	(X)
	With Mechanical Crushing Screening or Sizing Only					
	Strip Pit					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	49.0	(X)	¹ 38.8
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	38.6	(X)	(NA)	(X)
	Received from other establishments.....	...do.....	2.2	6.3	(NA)	3.9
	Mined and prepared at the same establishments.....	...do.....	36.4	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	12.5	(X)	17.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	1.3	36.0	2.1
289212	Ammonium nitrate.....	...do.....	95.9	3.6		
289214	Blasting accessories.....		(X)	1.0	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 short tons	(NA)	1.1	2.9	0.6
345210	Roof bolts.....	...do.....	(Z)	(Z)		
241100	Round or hewn woods products and stumpage.....		(X)	0.1	(X)	(Z)
970099	All other supplies used.....		(X)	19.8	(X)	¹ 10.4
976000	Selected supplies, minerals received for preparation and purchased machinery installed, n.s.k.....		(X)	3.3	(X)	2.7

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Type of Operations--Continued					
	Mines With Preparation Plants--Continued					
	With Mechanical Crushing, Screening, Sizing Only--Con.					
	Pits--Continued					
	Fuels used, total.....		(X)	4.9	(X)	4.0
121005	Coal--bituminous, lignite, and anthracite.....	1,000 s. tons...	(D)	(D)	-	-
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	568.3	3.0	439.0	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	188.4	0.1	62.0	(NA)
291111	Gasoline.....	Million gallons.	3.4	0.9	4.7	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.2	(X)	0.3
977000	Undistributed fuels.....		(X)	0.7	(X)	(Z)
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons...	2.0	(X)	14.0	(X)
	Underground					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	50.6	(X)	30.6
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	28.7	(X)	(D)	(X)
	Received from other establishments.....	...do.....	(D)	(D)	(D)	(D)
	Mined and prepared at the same establishments.....	...do.....	(D)	(X)	(D)	(X)
353011	Purchased machinery installed.....		(X)	19.9	(X)	8.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	1.1	3.8	0.7
289212	Ammonium nitrate.....	...do.....	(D)	(D)		
289214	Blasting accessories.....		(X)	0.3	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	2.0	12.8	2.5
345210	Roof bolts.....	...do.....	14.5	3.6		
241100	Round or hewn woods products and stumpage.....		(X)	1.3	(X)	0.9
970099	All other supplies used.....		(X)	16.6	(X)	11.9
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	5.8	(X)	1.6
	Fuels used, total.....		(X)	0.7	(X)	0.5
121005	Coal--bituminous, lignite, and anthracite.....	1,000 s. tons...	(D)	(D)	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	41.7	0.2	30.0	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	7.0	(NA)
291111	Gasoline.....	Million gallons.	16.2	0.1	1.0	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.3	(X)	0.1
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons...	3.2	(X)	20.0	(X)
	Strip Pit and Auger and Auger Only					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	11.0	(X)	10.7
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	9.5	(X)	(NA)	(X)
	Received from other establishments.....	...do.....	(D)	(D)	(NA)	2.3
	Mined and prepared at the same establishment.....	...do.....	(D)	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	3.5	(X)	3.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.3	0.6	0.5
289212	Ammonium nitrate.....	...do.....	16.8	0.7		
289214	Blasting accessories.....		(X)	0.2	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	0.2	0.2	(Z)
345210	Roof bolts.....	...do.....	(D)	(D)		
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	(Z)
970099	All other supplies used.....		(X)	3.7	(X)	3.3
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	2.5	(X)	1.3

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	Type of Operations--Continued		INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Mines With Preparation Plants--Continued					
	With Mechanical Crushing, Screening, Sizing Only--Con.					
	Strip Pit and Auger and Auger Only--Continued					
	Fuels used, total.....		(X)	1.4	(X)	1.5
121005	Coal--bituminous, lignite, and anthracite.....	1,000 s. tons...	(D)	(D)	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	182.6	1.0	170.0	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	8.0	(NA)
291111	Gasoline.....	Million gallons.	(NA)	0.2	1.4	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.2	(X)	0.1
977000	Undistributed fuels.....				(X)	0.1
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons...	(D)	(X)	39.0	(X)
	Strip Pit and Underground and Other Combinations					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	10.2	(X)	4.1
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	8.5	(X)	(NA)	(X)
	Received from other establishments.....	...do.....	1.0	2.5	(NA)	2.3
	Mined and prepared at the same establishment.....	...do.....	7.5	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	1.4	(X)	0.7
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.2	0.4	0.1
289212	Ammonium nitrate.....	...do.....	7.2	0.4		
289214	Blasting accessories.....		(X)	0.3	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	0.4	0.4	0.1
345210	Roof bolts.....	...do.....	4.1	0.1		
241100	Round or hewn woods products and stumpage.....		(X)	0.1	(X)	(Z)
970099	All other supplies used.....		(X)	3.6	(X)	0.8
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	1.2	(X)	0.1
	Fuels used, total.....		(X)	0.7	(X)	0.1
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	55.6	0.3	13.0	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gallons.	0.4	0.1	0.3	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(Z)
977000	Undistributed fuels.....		(X)	0.2	(X)	(Z)
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons...	-	(X)	(Z)	(X)
	Other Preparation Methods					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	0.5	(X)	(NA)
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	(Z)	(X)	(NA)	(X)
	Received from other establishments.....	...do.....	(D)	(D)	(NA)	(NA)
	Mined and prepared at the same establishment.....	...do.....	(D)	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	(D)	(X)	(NA)
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	(D)	(NA)	(NA)
289212	Ammonium nitrate.....	...do.....	5.1	0.1	(NA)	(NA)
289214	Blasting accessories.....		(X)	(D)	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons...	(NA)	(D)	(NA)	(NA)
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	(NA)
970099	All other supplies used.....		(X)	0.4	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....					
	Fuels used, total.....		(X)	0.1	(X)	(NA)
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	5.3	(Z)	(NA)	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
291111	Gasoline.....	Million gallons.	(Z)	(Z)	(NA)	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(NA)
977000	Undistributed fuels.....					
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons...	81.0	(X)	(NA)	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1211.--BITUMINOUS COAL--Continued			
	Type of Operation--Continued					
	Preparation Plants Only					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	242.3	(X)	230.4
	Raw coal for preparation:					
121191	For mechanical cleaning.....	Million s. tons.	46.6	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	46.6	188.5	(NA)	172.6
121193	For mechanical crushing, screening, or sizing only.....	..do.....	11.8	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	11.8	42.3	(NA)	43.3
353011	Purchased machinery installed.....		(X)	4.4	(X)	5.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	(D)	0.1	(Z)
289212	Ammonium nitrate.....	..do.....	-	-		
289214	Blasting accessories.....		(X)	-	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	(NA)	0.7	3.2	0.5
345210	Roof bolts.....	..do.....	0.2	(Z)		
241100	Round or hewn woods products and stumpage.....		(X)	(D)	(X)	(Z)
970099	All other supplies used.....					
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	6.3	(X)	8.7
	Fuels used, total.....		(X)	0.9	(X)	0.5
121005	Coal--bituminous, lignite, and anthracite.....	1,000 s. tons..	(D)	(D)	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	30.9	0.1	31.0	(NA)
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	..do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	49.0	(NA)
291111	Gasoline.....	Million gallons.	0.3	0.1	0.5	(NA)
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.7	(X)	(Z)
977000	Undistributed fuels.....				(X)	(X)	0.2
	Nonproducing Establishments					
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	3.1	(X)	5.3
353011	Purchased machinery installed.....		(X)	2.9	(X)	4.9
970099	All other supplies used.....		(X)	0.2	(X)	0.4
			INDUSTRY 1212.--LIGNITE			
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.6	(X)	(¹)
	Raw coal for preparation:					
121193	For mechanical crushing, screening, or sizing only.....	Million s. tons.	6.5	(X)	(NA)	(X)
	Received from other establishments.....	..do.....	(D)	(D)	(D)	(D)
	Mined and prepared at the same establishment.....	..do.....	(D)	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	3.2	(X)	4.3
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	(NA)	0.1	0.3	0.1
289212	Ammonium nitrate.....	..do.....	(NA)			
289214	Blasting accessories.....		(X)	0.2	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	0.4		0.2	0.1
241100	Round or hewn woods products and stumpage.....		(X)	1.9	(X)	(Z)
970099	All other supplies used.....		(X)		(X)	(¹)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....		(X)	0.2	(X)	0.1
	Fuels used, total.....		(X)	0.3	(X)	0.2
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels...	30.8	0.1	26.0	0.1
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	..do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	10.0	(Z)
291111	Gasoline.....	Million gallons.	0.2	0.1	0.3	0.1
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....		(X)	0.1	(X)	(Z)
977000	Undistributed fuels.....				(X)	(X)	(Z)
121195	Coal from same mine or plant used at same establishment for power or heat.....	1,000 s. tons..	(D)	(X)	6.0	(X)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1213.--BITUMINOUS COAL MINING SERVICES			
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	9.1	(X)	7.2
353011	Purchased machinery installed.....	.....	(X)	2.1	(X)	2.7
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	Million pounds..	976.1	0.2	(NA)	(NA)
289212	Ammonium nitrate.....	..do.....	8,332.4	0.4	(NA)	(NA)
289214	Blasting accessories.....	.....	(X)	0.1	(X)	(NA)
331201	Steel mill shapes and forms.....	1,000 s. tons..	2.9	0.6	(NA)	(NA)
970099	All other supplies used.....	.....	(X)	4.7	(X)	(NA)
976000	Selected supplies, minerals received for preparation, and purchased machinery installed, n.s.k.....	.....	(X)	1.1	(X)	4.5
	Fuels used, total.....	.....	(X)	1.0	(X)	1.3
121005	Coal--bituminous, lignite, and anthracite.....	1,000 s. tons..	-	-	(Z)	(Z)
	Fuel oil:					
291141	Distillate (light), grade numbers 1, 2, 4, and light diesel fuel	1,000 barrels..	87.5	0.5	146.0	0.8
291151	Residual (heavy) grade numbers 5, and 6 and heavy diesel fuel...	...do.....				
131300	Gas--natural, manufactured, and mixed.....	Million cu. ft..	(D)	(D)	-	-
291111	Gasoline.....	Million gallons.	(NA)	0.1	1.1	0.3
960018	Other fuels--liquefied petroleum gas, coke, wood, and other.....	.....	(X)	0.4	(X)	(Z)
977000	Undistributed fuels.....	.....			(X)	0.1

Standard notes: - Represents zero. (NA) Not available. (X) Not applicable. (D) Withheld to avoid disclosing figures for individual companies. Figures are included in all other supplies used.

¹Figures for the lignite industry are included with those for the bituminous coal industry.

²Excludes blasting accessories and breaking agents.

³Represents such items as rails, wheels, track accessories, plates, pipe, tubing, piling, drill steel bars, other bars, sheets, strip, wire, wire products, and structural shapes.

⁴Represents such items as logs, bolts, hewn cross ties, and hewn or round mine timbers and ties.

⁵Data for code 121191 included with code 121193.

⁶Figures for receipts of raw coal for mechanical crushing, screening, and sizing are combined with those for receipts for mechanical cleaning.

⁷Figures for Maryland combined with Virginia in 1963.

⁸Figures for coal received from other establishments are included with those for coal mined and prepared at same establishments.

⁹Includes auger, dredge, strip pit and underground, strip pit and auger, and other combinations.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.



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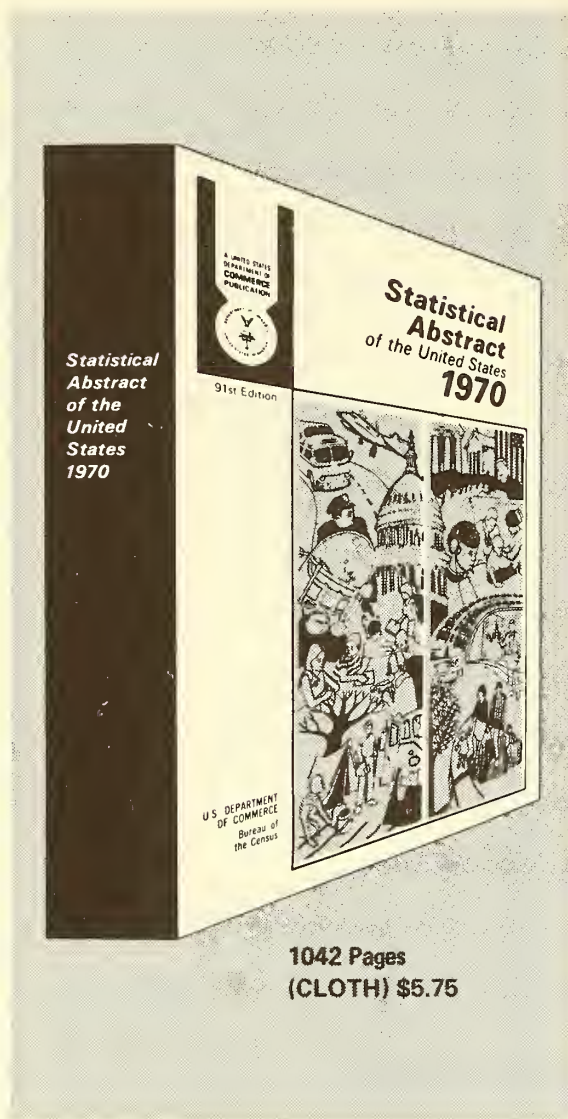
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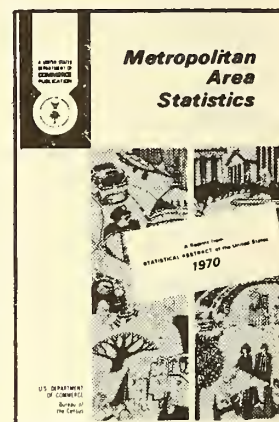
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OIL AND GAS EXTRACTION

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Major Group 13, Oil and Gas Extraction. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1311--Crude Petroleum and Natural Gas	MIC67(1)-13A
1321--Natural Gas Liquids	MIC67(1)-13B
1381--Drilling Oil and Gas Wells	} MIC67(1)-13C
1382--Oil and Gas Field Exploration Services	
1389--Oil and Gas Field Services,	
Not Elsewhere Classified	

INDUSTRY DESCRIPTIONS

The Oil and Gas Extraction Industries represent establishments primarily engaged in the production of crude petroleum and natural gas, the recovery of oil and gas from oil sands and oil shale (no such activities were reported for 1967), and the production of natural gasoline and cycle condensate. Types of activities included are exploration, drilling, oil and gas well operation and maintenance, the operation of natural gasoline and cycle plants, and the mining and extraction of oil from oil sands and oil shale. This major group also includes such basic activities as emulsion breaking and desilting of crude petroleum to render the oil marketable. Pipeline transportation of petroleum, gasoline, and other petroleum products (except gathering lines) is classified in Major Group 46--Pipeline Transportation, and of natural gas in Major Group 49--Electric, Gas, and Sanitary Services. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29--Petroleum Refining and Related Industries.

SUMMARY OF FINDINGS

The combined value of shipments and receipts of all industries in Major Group 13 was \$17,455.9 million. Establishments in the Crude Petroleum and Natural Gas Industry accounted for \$11,731.7 million, the Natural Gas Liquids Industry for \$3,707.6 million, and the Oil and Gas Field Services Industries for \$2,016.7 million. These figures represent the gross value of shipments and receipts. Figures for the Natural Gas Liquids Industry duplicate, in part, those for the Crude Petroleum and Natural Gas Industry due to the inclusion in shipments from the Natural Gas Liquids Industry of residue gas which was reported, prior to processing, as a shipment from the Crude Petroleum and Natural Gas Industry. Likewise, figures for the Natural Gas Liquids Industry contain some duplication due to the transfer of natural gas liquids from one establishment to another within the industry for further processing. Also, industries in the group contain some duplication due to the inclusion of products purchased and resold without further processing.

Table 1 of this report presents comparative general statistics for all Oil and Gas Extraction Industries combined for the census years 1860 to 1967. The first well was drilled for oil in the United States in 1859. Table 2 presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. In table 3, detailed statistics are shown for the United States by 4-digit industry.

COVERAGE

An establishment operating oil or gas field properties, for census purposes, is defined as all oil and gas fields activities of an operating company in an entire State. Separate reports were required for each State in which a company operated oil or gas field properties except for Louisiana, Texas, New Mexico, and California, where separate reports were required by district. (Separate subindustry statistics were tabulated for establishments primarily engaged in producing crude petroleum and natural gas, respectively.) These subindustry statistics are shown in table 3 and in the report, Crude Petroleum and Natural Gas. Separate reports were required for each natural gas liquids plant.

Companies engaged in oil and gas field services reported on the same basis as companies operating oil and gas field properties, that is, they were required to submit separate reports for each State in which they provide oil and gas field services except for Louisiana, Texas, New Mexico, and California, where separate reports were required by district. Service establishments were classified in the separate service industries on the basis of the principal kind of work performed as measured by receipts for such services.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1967:											
Oil and gas extraction, total.....	¹ 16,358	2,681	244.9	1,855.1	167.2	346.5	1,091.4	13,394.3	7,066.2	17,455.9	3,004.6
Crude petroleum and natural gas.....	¹ 8,796	1,034	126.4	1,049.1	66.2	130.0	440.3	10,965.0	3,308.3	11,731.7	2,541.6
Natural gas liquids.....	684	216	12.4	99.5	10.5	21.0	82.1	905.0	3,016.9	3,707.6	214.4
Oil and gas field services.....	¹ 6,878	1,431	106.1	706.5	90.6	195.5	569.0	1,524.2	741.0	2,016.7	248.5
1963:											
Oil and gas extraction, total.....	21,242	2,448	271.5	1,744.7	192.0	397.3	1,093.0	11,019.8	6,044.4	14,512.5	2,551.7
Crude petroleum and natural gas.....	14,378	954	145.2	1,016.4	83.4	166.3	494.9	9,016.4	3,087.3	9,893.6	2,209.9
Natural gas liquids.....	652	245	13.7	96.6	11.9	24.5	80.7	762.1	2,152.6	2,800.8	113.9
Oil and gas field services.....	6,212	1,249	112.4	631.7	96.6	206.6	517.4	1,241.4	804.4	1,817.9	227.9
1958:											
Oil and gas extraction, total.....	18,522	2,691	312.9	1,700.7	214.0	440.3	1,011.2	9,032.5	4,799.5	11,637.9	2,194.0
Crude petroleum and natural gas.....	12,010	1,093	180.1	1,043.1	102.5	201.0	497.9	³ 7,339.9	2,997.2	³ 8,385.9	1,947.6
Natural gas liquids.....	593	290	16.5	96.3	13.4	26.9	75.7	587.6	1,132.4	1,625.1	94.9
Oil and gas field services.....	5,919	1,308	116.3	561.3	98.1	212.3	437.6	³ 1,107.8	669.8	³ 1,625.9	151.5
1954:											
Oil and gas extraction, total.....	17,591	2,768	315.8	1,462.9	235.5	491.8	976.8	² 37,673.7	² 3,894.2	² 39,341.5	2,228.2
Crude petroleum and natural gas ¹	11,508	1,042	172.5	835.7	109.8	216.6	460.0	6,129.2	2,839.3	7,070.1	1,898.5
Natural gas liquids.....	562	287	17.3	85.1	13.6	27.9	64.0	² 425.9	² 324.4	² 640.4	110.0
Oil and gas field services ³	5,515	1,437	125.9	541.6	112.1	247.3	452.7	1,118.5	730.4	1,631.0	217.9
1939: ³											
Oil and gas extraction, total.....	10,909	(NA)	186.2	318.4	149.0	265.0	220.4	² 1,242.5	417.4	³ 1,659.8	(NA)
Crude petroleum and natural gas ⁴	8,605	(NA)	136.1	234.9	105.5	190.7	155.7	1,072.0	304.0	³ 1,376.0	(NA)
Natural gas liquids ⁴	685	(NA)	10.3	18.3	8.3	16.6	13.2	² 170.5	19.6	³ 96.3	13.0
Oil and gas field services.....	1,619	(NA)	39.8	65.2	35.2	57.7	51.5		(NA)	³ 187.5	(NA)
Crude petroleum and natural gas and natural gas liquids only:											
1919 ⁵	9,970	(NA)	111.6	169.3	93.7	(NA)	135.4	613.7	318.0	931.8	(NA)
1909.....	8,202	(NA)	44.0	35.6	37.6	(NA)	28.1	112.0	73.5	185.4	(NA)
1902 ⁵	(NA)	(NA)	27.6	21.3	⁶ 22.4	(NA)	16.4	59.0	43.2	³ 102.3	(NA)
1889.....	(NA)	(NA)	29.2	10.3	26.9	(NA)	8.7	15.3	22.7	³ 38.0	(NA)
1880 ⁷	(NA)	(NA)	11.5	7.2	(NA)	(NA)	(NA)	17.7	6.9	³ 24.6	(NA)
1870.....	2,314	(NA)	4.5	4.0	(NA)	(NA)	(NA)	17.9	1.4	³ 19.3	(NA)
1860 ⁸	64	(NA)	0.9	0.3	(NA)	(NA)	(NA)	2.1	2.2	4.3	(NA)

Standard Notes: -Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

¹In 1967, for the first time, data for single unit establishments without paid employees were excluded from the census. In 1963, there were 3,714 single unit establishments in Major Group 13, Oil and Gas Extraction. In the Crude Petroleum and Natural Gas Industry, there were 3,131 establishments, and in the Oil and Gas Services Field Industries there were 583 establishments. These establishments for mining as a whole accounted for approximately 3 percent of value added in the 1963 census.

²For 1954 and 1939, no data were obtained on the value of gas received for processing at natural gas liquids plants or on the value of residue gas sold or transferred. However, for 1954 the estimated value (prior to processing) of natural gas liquids contained in such gas was included with the value of natural gas liquids received for processing and used in computing value added. No figures for the value of residue gas are included in the value of shipments and receipts shown for 1954. For 1939, the cost of supplies, purchases for resale and purchased fuels and electric energy for all Oil and Gas Extraction Industries includes the estimated cost of such items and subcontract work to the Oil and Gas Field Services Industries, for which such data were not requested in 1939. These estimates are used in computing value added for such industries. For Alaska in 1958 and 1954, the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded value of shipments and capital expenditures.

³Excludes figures for Alaska. Only one such producing establishment was reported for 1919.

⁴Data for 2 nonproducing natural gas liquids plants are included with data for the Crude Petroleum and Natural Gas Industry.

⁵For 1902, data were also obtained from the operators of oil and gas field properties on the average number of employees at contract services operations performed for them. The total number of such employees was reported as 12,143.

⁶Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

⁷Excludes natural gas operations. Although natural gas was used widely in 1880, it was still of relatively little commercial importance.

⁸Reported as "oil, coal" and probably includes some refining as well as the production of crude petroleum, or may represent primarily the recovery of oil from coal.

⁹Represents value of net shipments and receipts.

TABLE 2. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added in mining (million dollars)
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
13	United States, total.....	16,358	2,681	244.9	1,855.1	167.2	346.5	1,091.4	13,394.3	7,066.2	17,455.9	3,004.6	271.5	11,019.8
131	Crude petroleum and natural gas.....	8,796	1,034	126.4	1,049.1	66.2	130.0	440.3	10,965.0	3,308.3	11,731.7	2,541.6	145.2	9,016.4
132	Natural gas liquids.....	684	216	12.4	99.5	10.5	21.0	82.1	905.0	3,016.9	3,707.6	214.4	13.9	762.1
138	Oil and gas field services..	6,878	1,431	106.1	706.5	90.6	195.5	569.0	1,524.2	741.0	2,016.7	248.5	112.4	1,241.4
13	Northeast Region.....	683	46	4.4	31.7	3.2	6.5	17.2	63.3	27.2	78.2	12.4	5.7	59.8
131	Crude petroleum and natural gas.....	463	34	3.3	23.5	2.2	4.4	11.4	46.3	17.3	53.5	10.1	4.7	50.4
13	New York.....	136	12	0.8	7.8	0.4	0.9	2.2	10.1	2.8	11.4	1.5	1.0	9.6
131	Crude petroleum and natural gas.....	98	11	0.7	6.9	0.3	0.6	1.4	8.0	2.1	8.9	1.3	0.9	8.0
13	Pennsylvania.....	527	33	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.7	50.2
131	Crude petroleum and natural gas.....	364	23	2.6	16.6	1.9	3.9	10.0	38.6	14.6	44.6	8.7	3.8	42.4
13	East North Central Division.....	1,399	132	10.8	65.8	8.9	16.9	48.0	277.1	186.5	413.4	50.3	12.5	332.0
131	Crude petroleum and natural gas.....	818	65	5.8	37.4	4.3	7.8	23.9	213.0	76.9	247.4	42.6	8.0	277.4
13	Ohio.....	476	22	2.7	16.3	2.2	3.9	11.0	36.0	27.4	50.2	13.3	2.6	31.7
13	Illinois.....	535	74	5.5	32.6	4.6	9.0	25.5	171.8	55.1	200.3	26.6	6.5	215.2
131	Crude petroleum and natural gas.....	305	38	3.2	20.2	2.6	4.7	14.8	142.6	44.5	164.7	22.4	4.3	186.9
13	Michigan.....	171	19	1.4	9.5	1.2	2.3	7.4	46.5	96.2	135.5	7.2	21.9	60.1
13	West North Central Division.....	1,234	156	12.2	79.4	9.1	18.2	52.2	508.1	299.8	734.6	73.3	14.6	536.9
131	Crude petroleum and natural gas.....	681	86	7.1	48.4	4.5	8.7	25.5	394.6	124.3	459.7	59.2	8.5	455.9
13	Missouri.....	37	4	0.9	8.4	0.1	0.2	0.5	1.4	0.7	1.6	0.5	0.2	0.5
13	North Dakota.....	105	16	1.2	8.8	1.1	2.1	7.0	67.6	37.7	87.8	17.5	1.1	67.2
131	Crude petroleum and natural gas.....	58	3	0.5	3.3	0.3	0.6	2.1	51.8	26.8	63.3	15.4	0.4	55.0
13	Nebraska.....	113	10	0.7	4.2	0.6	1.1	3.5	31.3	13.0	38.7	5.6	0.9	57.7
13	Kansas, total.....	953	125	9.1	55.7	7.4	14.7	41.1	407.6	247.6	605.7	49.6	12.2	411.4
131	Crude petroleum and natural gas.....	521	76	5.3	33.4	4.0	7.7	22.0	319.2	88.0	366.5	40.7	7.4	350.7
13	South Atlantic Division.....	789	44	4.3	25.8	3.4	6.6	17.2	110.6	121.7	203.6	28.7	5.0	77.8
131	Crude petroleum and natural gas.....	584	20	2.8	17.2	2.1	4.0	9.9	71.7	28.3	76.4	23.7	3.4	52.1
13	West Virginia.....	716	37	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.8	72.9
13	Florida.....	45	5	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Geographic Area Division														
13	East South Central Division.....	673	89	6.9	43.8	5.4	11.2	31.6	271.2	176.5	384.8	62.9	8.8	289.6
131	Crude petroleum and natural gas.....	331	39	3.5	23.9	2.5	5.1	14.5	217.4	78.4	239.6	56.1	4.6	237.3
13	Kentucky.....	361	29	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.0	77.4
131	Crude petroleum and natural gas.....	189	16	1.9	10.6	1.6	3.0	8.0	51.6	13.4	54.3	10.6	2.6	58.8
13	Alabama.....	44	4	0.4	1.8	0.3	0.5	1.5	20.2	6.0	23.7	2.5	0.4	19.4
13	Mississippi.....	249	56	3.6	25.8	2.7	5.8	17.3	178.6	84.0	215.0	47.6	4.4	192.5
131	Crude petroleum and natural gas.....	107	22	1.5	12.5	0.9	1.9	6.0	147.7	60.0	164.9	42.8	1.9	162.8
13	West South Central Division.....	8,945	1,689	160.9	1,233.4	106.0	222.3	692.8	9,625.1	4,865.6	12,495.9	1,995.0	181.8	7,543.9
131	Crude petroleum and natural gas.....	4,667	593	80.3	690.4	38.1	75.4	262.5	7,912.1	2,165.4	8,426.4	1,651.1	91.0	6,060.0
132	Natural gas liquids.....	499	162	9.4	75.8	7.8	15.7	60.9	718.8	2,212.7	2,753.7	177.9	10.2	587.9
138	Oil and gas field services...	3,779	934	71.2	467.2	60.1	131.2	369.4	994.2	487.5	1,315.8	166.0	80.5	896.0
13	Arkansas.....	206	24	1.5	9.3	1.2	2.6	7.0	79.8	29.9	94.3	15.5	2.2	67.9
131	Crude petroleum and natural gas.....	127	9	0.7	4.7	0.5	1.0	3.1	68.0	15.4	69.4	14.0	1.2	58.5

See footnotes at end of table.

TABLE 2. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	Geographic Area Division--Con.													
	West South Central Division--Con.													
13	Louisiana.....	1,276	378	42.1	340.3	31.0	68.8	225.0	3,773.7	2,133.1	4,912.7	994.0	42.4	2,557.2
131	Crude petroleum and natural gas.....	522	116	18.4	166.3	10.3	21.4	80.5	3,223.0	976.9	3,349.4	850.4	17.1	2,107.2
132	Natural gas liquids.....	98	25	1.4	11.6	1.2	2.5	9.6	152.4	950.9	1,040.7	62.6	1.5	154.9
138	Oil and gas field services...	656	237	22.3	162.5	19.5	44.9	134.9	398.3	205.3	522.6	81.0	23.9	295.2
13	Oklahoma.....	1,683	278	28.5	211.3	16.2	32.4	95.5	964.3	413.3	1,192.5	185.1	31.0	785.4
131	Crude petroleum and natural gas.....	918	103	16.1	132.7	7.1	13.5	44.5	758.0	227.9	828.3	157.6	18.6	627.4
13	Texas.....	5,780	1,009	88.7	672.4	57.6	118.4	365.3	4,807.4	2,289.3	6,296.3	800.3	106.1	4,133.5
131	Crude petroleum and natural gas.....	3,100	365	45.0	386.7	20.2	39.5	134.3	3,863.1	945.2	4,179.3	629.0	54.1	3,267.0
132	Natural gas liquids.....	313	110	6.3	51.2	5.4	10.9	42.9	474.9	1,117.5	1,490.1	102.3	6.9	360.8
138	Oil and gas field services...	2,367	534	37.4	234.5	32.0	68.0	188.1	469.4	226.6	626.9	69.0	45.1	505.7
13	Mountain Division.....	1,631	279	20.4	152.3	14.7	30.5	98.6	1,254.4	652.6	1,629.8	277.1	21.6	1,116.4
131	Crude petroleum and natural gas.....	769	99	9.0	76.2	4.7	9.3	33.2	1,051.7	318.1	1,134.0	235.7	11.5	969.3
132	Natural gas liquids.....	74	26	1.4	10.7	1.2	2.4	9.8	56.7	258.1	293.8	20.9	1.2	47.2
138	Oil and gas field services...	788	154	10.0	65.4	8.8	18.7	55.7	146.0	76.4	202.0	20.3	8.9	99.9
13	Montana.....	206	22	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.3	72.3
131	Crude petroleum and natural gas.....	107	8	0.6	4.5	0.4	0.8	2.7	75.0	28.5	80.8	22.7	1.1	59.0
13	Wyoming.....	360	64	5.1	38.4	3.7	8.0	26.8	407.5	163.9	503.1	68.3	5.3	369.4
131	Crude petroleum and natural gas.....	149	25	2.1	18.2	1.2	2.4	9.5	359.5	102.2	399.7	61.9	2.9	334.3
132	Natural gas liquids.....	19	3	0.3	2.0	0.2	0.5	1.9	9.0	40.2	48.5	0.8	0.2	8.6
138	Oil and gas field services...	192	36	2.8	18.2	2.3	5.1	15.4	39.0	21.5	55.0	5.6	2.1	26.5
13	Colorado.....	327	52	3.9	36.5	1.8	3.7	13.4	115.7	59.1	146.4	28.5	3.6	125.5
131	Crude and petroleum natural gas.....	165	28	2.6	26.9	0.7	1.4	5.7	94.3	35.6	104.5	25.5	2.7	109.9
132	Natural gas liquids.....	11	3	0.1	0.9	0.1	0.2	0.8	3.2	15.5	18.4	0.3	0.1	4.8
138	Oil and gas field services...	151	21	1.2	8.8	1.0	2.0	6.9	18.2	8.1	23.5	2.7	0.8	10.7
13	New Mexico.....	567	118	8.3	56.3	6.6	13.5	41.6	546.8	344.2	764.1	126.8	9.0	448.2
131	Crude petroleum and natural gas.....	264	31	3.3	23.7	2.1	4.1	13.4	447.3	124.0	470.3	101.0	4.2	376.3
132	Natural gas liquids.....	36	20	0.9	7.3	0.8	1.7	6.6	41.3	191.9	214.5	18.7	0.8	31.3
138	Oil and gas field services...	267	67	4.1	25.3	3.7	7.7	21.6	58.2	28.2	79.3	7.1	4.0	40.6
13	Arizona.....	43	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	0.4
13	Utah.....	112	21	1.1	7.9	0.9	1.9	6.5	80.0	38.0	94.3	23.6	1.3	100.1
13	Nevada.....	15	1	0.1	0.6	0.1	0.2	0.5	1.2	1.3	1.9	0.6	(Z)	0.5
13	Pacific Division.....	1,004	246	25.0	222.9	16.4	34.5	133.4	1,284.0	736.6	1,515.6	505.0	21.5	1,063.4
131	Crude petroleum and natural gas.....	475	98	14.6	132.2	7.6	15.3	59.4	1,058.3	499.6	1,094.6	463.3	13.5	914.0
132	Natural gas liquids.....	51	13	0.8	6.7	0.7	1.4	6.0	38.6	153.8	187.4	5.1	1.3	63.9
138	Oil and gas field services...	478	135	9.6	84.0	8.1	17.8	68.1	187.1	83.1	233.7	36.7	6.6	85.5
13	California.....	902	216	23.0	196.7	14.8	30.5	113.1	1,064.7	569.5	1,334.1	300.2	20.6	1,023.6
138	Oil and gas field services...	422	113	8.1	63.9	6.7	14.2	50.2	119.8	48.7	148.2	20.5	6.1	73.7
13	Alaska.....	74	29	1.9	24.9	1.5	3.8	19.6	216.6	161.3	178.8	199.1	0.8	41.4

Standard Notes: --Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (Z) Less than \$50 thousand or 50 employees.

¹Industry groups with less than 50 employees are omitted. They are included, however, in higher level totals. For industries and industry groups with 50 or more employees which cannot be shown because they would disclose figures for individual companies, the number of establishments is shown and the employment size range is indicated by one of the following symbols:

BB - 50-99 employees
CC - 100-249 employees

EE - 250-499 employees
FF - 500-999 employees

CC - 1,000-2,499 employees
HH - 2,500 and over employees

²Includes figures for separately reported central offices and related facilities in Wisconsin.

TABLE 3. Detailed Statistics: 1967

Item	13-Oil and gas extraction industries, total	1311-Crude petroleum and natural gas industry			1321-Natural gas liquids industry	1381-Drilling oil and gas wells industry	1382-Oil and gas field exploration services industry	1389-Oil and gas field services, n.e.c., industry
		Total	Crude petroleum subindustry	Natural gas subindustry				
Establishments, total.....number..	16,358	8,796	7,278	1,518	684	2,347	636	3,895
With 1 to 19 employees.....do....	13,677	7,762	6,422	1,340	468	1,766	537	3,144
With 20 to 99 employees.....do....	2,271	797	650	147	209	505	78	682
With 100 or more employees.....do....	410	237	206	31	7	76	21	69
All employees (average for year).....1,000..	244.9	126.4	106.8	19.6	12.4	42.9	8.4	54.8
Payroll (all employees), total for year..million dollars..	1,855.1	1,049.1	901.7	147.4	99.5	294.7	53.1	358.7
Production, development, and exploration workers:								
Average for the year.....1,000..	167.2	66.2	54.9	11.2	10.5	38.7	6.6	45.3
March.....do....	166.1	66.4	55.3	11.1	10.4	37.1	6.8	45.4
May.....do....	166.9	65.9	54.7	11.2	10.4	38.6	6.6	45.4
August.....do....	170.8	67.6	55.9	11.7	10.6	39.9	6.6	46.1
November.....do....	166.2	64.8	54.0	10.9	10.4	39.6	6.4	44.9
Man-hours.....millions..	346.5	130.0	107.7	22.3	21.0	81.4	15.9	98.2
Wages.....million dollars..	1,091.4	440.3	365.6	74.7	82.1	255.2	39.4	274.4
Supplemental labor cost not included in payroll.....do....	169.4	87.2	71.1	16.1	12.2	31.2	3.8	35.0
Legally required expenditures, including Social Security contributions.....do....	85.1	32.3	26.5	5.8	4.4	25.1	2.6	20.7
Payments for voluntary programs.....do....	84.4	54.9	44.6	10.3	7.9	6.1	1.2	14.3
Cost of supplies, etc., total.....do....	7,066.2	3,308.3	2,771.8	536.5	3,016.9	406.7	45.5	288.8
Supplies used, minerals received for preparation, and purchased machinery.....do....	5,161.0	1,630.9	1,338.2	292.7	2,946.9	322.3	34.2	226.7
Cost of resales.....do....	21.3	3.0	2.9	0.1	(Z)	0.9	3.8	13.6
Purchased fuels consumed.....do....	118.7	48.6	43.7	4.9	11.8	31.1	2.6	24.6
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	9,520.2	8,352.3	7,967.3	384.9	1,032.7	50.6	5.3	79.4
Cost.....million dollars..	119.1	105.4	100.2	5.2	11.0	0.8	0.1	1.8
Generated less sold.....million kw.-hrs..	2,412.6	510.2	476.6	33.5	1,424.1	473.2	-	5.1
Contract work.....million dollars..	1,645.6	1,519.8	1,286.3	233.6	47.2	51.6	4.8	22.1
Value of shipments and receipts (including resales), total.....do....	17,455.9	11,731.7	9,648.7	2,082.9	3,707.6	893.7	152.0	971.0
Value of resales.....do....	33.3	3.0	2.9	0.1	(Z)	1.0	4.4	24.9
Value added in mining.....million dollars..	13,394.3	10,965.0	8,943.0	2,022.1	905.0	627.4	126.4	770.4
Capital expenditures (except land and mineral rights), total.....do....	3,004.6	2,541.6	2,066.1	475.6	214.4	140.4	19.9	88.2
Mineral development and exploration.....do....	1,401.3	1,372.4	1,114.0	258.4	-	26.5	0.3	2.1
New structures and additions.....do....	490.6	364.8	293.6	71.2	112.7	10.0	0.2	2.9
New machinery and equipment.....do....	1,040.0	759.1	622.1	137.1	98.8	86.7	19.1	76.2
Used plant and equipment.....do....	72.6	45.4	36.4	8.9	2.8	17.2	0.3	7.0
Mineral development and exploration expenditures, total.....do....	2,002.7	1,938.9	1,553.9	385.0	(X)	53.2	1.9	8.7
Capitalized.....do....	1,401.3	1,372.4	1,114.0	258.4	(X)	26.5	0.3	2.1
Expensed.....do....	601.4	566.5	439.9	126.6	(X)	26.7	1.6	6.6
Man-hours worked by production, development, and exploration workers, total.....millions..	325.5	130.0	107.7	22.3	(X)	81.4	15.9	98.2
Operating and maintaining wells.....do....	116.7	108.8	92.0	16.8	(X)	2.3	0.1	5.5
Drilling wells and rig building.....do....	82.8	8.6	7.0	1.6	(X)	72.9	0.4	0.9
Exploration work.....do....	24.4	7.7	5.5	2.2	(X)	0.8	14.7	1.2
Other work.....do....	101.6	4.8	3.2	1.7	(X)	5.4	0.7	90.6

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Under 50 thousand (or under 50 employees).



1967 CENSUS OF MINERAL INDUSTRIES

FOR RELEASE:
June 17, 1971

U.S. DEPARTMENT OF COMMERCE / Bureau of the Census

Change Sheet

CRUDE PETROLEUM AND NATURAL GAS - MIC67(1)-13A

The following changes should be made to the indicated tables of the
subject publication:

PAGE 13A-20, TABLE 3A

Item	United States offshore
Crude petroleum shipments by ownership.....million barrels..	339.9 681.6
Operator accounts:	
Royalty.....do...	43.0 384.8
Oil production payments.....do...	8.9
Net operator accounts.....do...	203.3
Accounts of others.....do...	83.3
Undistributed.....do...	1.3
Natural gas shipments by ownership.....billion cu. ft..	1,743.7 (NA)
Operator accounts:	
Royalty.....do...	218.6 1,606.4
Gas production payments.....do...	44.2 368.7
Net operator accounts.....do...	946.0 8,086.4
Accounts of others.....do...	505.9 3,234.8
Undistributed.....do...	29.0 (NA)

Data shown for individual offshore areas are not affected by this revision.

PAGE 13A-41, TABLE 6B

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells								Cost of lease equipment beyond the Christmas tree
				All costs			Cost, excluding lease equipment beyond the Christmas tree					
		Total	Per well	Total	Per well	Per foot	Payments to drilling contractors including day work and turnkey	Payments to other contractors	Cost of casing, tubing, and well equipment	All other costs of drilling and equipping		
		(1,000 feet)	(feet)	(million dollars)	(\$1,000)	(dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
Illinois, total.....	728	1,704 1,949	2,341 2,677	16.6 32.6	22.8 44.8	9.74 16.73	4.3 9.3	1.3 4.3	3.5 7.5	3.1	4.4 8.4	
Oil wells.....	401	893 1,138	2,227 2,838	8.5 24.5	21.2 61.1	9.52 21.53	2.2 7.2	0.8 3.8	2.7 6.7	1.8	1.0 5.0	

Cost totals at the Geographic Division and U.S. levels which include these data are correct as published. However, comparable adjustments must be made to division and U.S. footage totals.

PAGE 13A-42, TABLE 6B

Geographic area and type of well	Wells drilled
West South Central division, offshore, total.....	1,017
Oil wells.....	432 482

Totals which include these data are correct as published.

PAGE 13A-44, TABLE 6B

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells		
				All costs		
		Total (1,000 feet)	Per well (feet)	Total (million dollars)	Per well (\$1,000)	Per foot (dollars)
West Texas A, total.....	1,348	8,142 7,863	6,040 5,907	151.7	112.5	18.63 19.96
Gas and gas condensate wells.....	79	1,039 860	13,152 10,886	56.5	715.7	54.38 68.76

Comparable adjustments must be made to totals appearing on pages 13A-41 and 13A-43.

PAGE 13A-58, TABLE 6D

Geographic area and depth range	Total footage drilled (1,000)
West Texas A.....	821 861
2,500 to 4,999 feet.....	44 74

Comparable adjustments must be made to totals appearing on pages 13A-56 and 13A-57.

1967 CENSUS OF Mineral Industries



MIC67(1)-13A

INDUSTRY SERIES

CRUDE PETROLEUM AND NATURAL GAS

SIC code	Industry
1311	Crude petroleum and natural gas

Issued December 1970



U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	5
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	7
2B General Statistics for Manufacturing Establishments With Mining Operations, by Geographic Area: 1967 and 1963	17
3A Detailed Statistics, by Geographic Area: 1967	20
3B Detailed Statistics, by Selected Types of Operations: 1967	27
4 General Statistics, by Employment Size of Establishment: 1967	29
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	30
6A Primary Products of the Industry, by Geographic Area: 1967 and 1963	31
6B Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967	41
6C Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well	47
6D Drilling Statistics for Exploration and Development Wells as Reported by Operators by Type of Well, Geographic Area, and Depth Range: 1967	53
7A Selected Supplies, Minerals Received for Preparation, and Purchased Machinery Installed, by Geographic Area and Type of Operation: 1967 and 1963	60
7B Fuels Used, by Geographic Area and Type of Operation: 1967 and 1963	65
7C Lease Tanks and Lease Stocks at the End of Year, by Geographic Area: 1967 and 1963	68
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES:
DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

CRUDE PETROLEUM AND NATURAL GAS

INDUSTRY DESCRIPTION

This report shows 1967 Census of Mineral Industries statistics for establishments classified in industry 1311, Crude Petroleum and Natural Gas. This industry represents establishments primarily engaged in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment; and all other activities incident to making oil and gas marketable up to the point of shipment from the producing property. This industry also includes production of oil through the mining and extraction of oil from oil shale and oil sands. Establishments primarily engaged in performing oil field services for operators on a contract, fee, or other basis are classified in Group 138, Oil and Gas Field Services.

Figures are also shown in several tables of this report for the two subindustries, Crude Petroleum and Natural Gas. These subindustries represent establishments primarily engaged in producing oil or developing oil properties or in producing gas or developing gas properties, respectively.

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

For census purposes, a crude petroleum or natural gas establishment covers all oil and gas field activities of an operating company in an entire State or, for Texas, Louisiana, New Mexico, and California, all such activities in one district. Separate reports were required for each State or district in which a company operated.

Production of natural gas liquids is classified in industry 1321, Natural Gas Liquids, and the statistics for this industry are shown in report MIC67(1)-13B. Statistics for establishments primarily engaged in performing oil and gas field services for others, classified in Group 138, Oil and Gas Field Services, are shown in report MIC67(1)-13C. Pipe line transportation of petroleum, gasoline, and other petroleum products is classified in Major Group 46, and pipe line transportation of natural gas in industries 4922 and 4923; such activities were not covered in the 1967 censuses. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29, Petroleum Refining and Related Industries, and the information reported for them is included in the Census of Manufactures publications.

Reports were obtained from the operators of oil and gas field properties, whether or not they owned the properties operated, but only one report was required for all oil and gas field properties operated in each State or district. These reports were classified in the Crude Petroleum and Natural Gas Subindustries, primarily on the basis of the product of principal value. In many cases, these reports covered the operation of both oil and gas and gas condensate wells. Moreover, the same well usually produces both oil and gas. Also, in 1967, lease condensate products were classified as natural gas subindustry products rather than crude petroleum subindustry products and lease condensate estimated product values were added to natural gas values in order to determine subindustry classifications of establishments. Hence, the subindustry statistics provide only a rough indicator of the differences in operating requirements for production of crude petroleum and natural gas. Drilling statistics for the 1967 Census of Mineral Industries cover all multiunit companies and single unit companies with 5 or more

employees. Because of the importance of drilling data, and since information on drilling was not available from administrative sources, a 5 percent sample of all single unit oil and gas companies with less than 5 employees was mailed a regular census schedule. However, a comparison of the data reported by these sample companies with other sources, indicates the reporting to be of such poor quality that it was decided to exclude these data from this census. To supply a link between the drilling data collected in the 1963 and 1967 censuses, a special tabulation of the 1963 census drilling data, excluding data for single unit establishments with less than 5 employees, was prepared and is shown in Table 6C.

SUMMARY OF FINDINGS

Value of Shipments and Receipts.--The total value of shipments and receipts of the Crude Petroleum and Natural Gas Industry amounted to \$11,732.7 million. Of this total, the Crude Petroleum Subindustry accounted for \$9,648.1 million, including \$8,098.7 million for crude petroleum, field condensate, and drips shipped and \$1,508.1 million for natural gas shipped. The Natural Gas Subindustry accounted for \$2,082.4 million, including \$698.4 million for crude petroleum, field condensate, and drips shipped and \$1,381.1 million for natural gas shipped.

Type of Operation.--For many purposes, a more useful classification of reports is by type of operation as shown in tables 2A and 3B and included in certain other tables of this report. This classification segregates reports representing oil wells only, both oil and gas and gas condensate wells, and gas and gas condensate wells only. (In the census, a well was defined as an oil well if oil was the principal product as measured by value, and as a gas and gas condensate well if the value of gas shipped exceeded the value of oil shipped.) Such a classification was also provided in the 1963, 1958, 1954, 1939, 1919, and 1909 censuses. For 1967, the value of shipments and receipts of establishments operating oil wells only was \$1,488.7 million; both oil and gas and gas condensate wells, \$9,763.7 million; and gas and gas condensate wells only, \$327.7 million. Since the largest reports usually covered both oil and gas and gas condensate wells, this group accounted for 79 percent of the total crude petroleum, field condensate, and drips produced in the Crude Petroleum and Natural Gas Industry and for about 87 percent of total gas production.

Total receipts for services performed for others by establishments in the Crude Petroleum and Natural Gas Industry were \$41.6 million. Separate reports for operation of oil and gas field properties were sometimes furnished by contractors who also operated wells. But in most cases consolidated reports were received for establishments primarily performing contract services in a State, but also operating oil and gas field properties. Such reports were classified in the contract services industries. The total value of crude petroleum, field condensate, and drips shipped in 1967 by such industries was \$40.7 million and the value of natural gas shipped was nearly \$10.0 million.

Separate type-of-operation statistics are shown in tables 2A and 3B for establishments with and without drilling. In addition, an undistributed category is included for central administrative offices and related facilities as well as imputed establishments.

Drilling Costs.--New capital expenditures in the Crude Petroleum and Natural Gas Industry amounted to \$2,536.2 million for all establishments. This represented 10 percent of the total new capital expenditures for all manufacturing and mineral industries combined, as compared with value added in mining by these industries which amounted to 4 percent of the total value added in manufacturing and mining. Expenditures for drilling wells amounted to \$2,063.9 million for drilling statistics which exclude single unit establishments with less than five employees. Such excluded establishments accounted to 10 percent of the 1963 Census drilling expenditures, thus more complete coverage would yield drilling cost closer to new capital expenditures. However, operators customarily do not capitalize the cost of drilling dry holes, for which the expenditures were \$582.5 million. Because of the magnitude of these drilling expenditures, and their continuing necessity to maintain

a domestic oil and gas production industry, detailed data on them were obtained in the 1967 census, as they were for 1963, 1958, 1954, and 1939. Figures for the number, footage, and cost for drilling and equipping oil, gas and gas condensate, dry, and service wells were obtained separately by type of well.

Operators reporting in the census drilled and completed 21604 wells, including 10028 oil wells, 2677 gas and gas condensate wells, 6864 dry holes, and 1042 service wells in the United States during the year. The detailed statistics for footage and costs for drilling and completing these wells are shown in table 6B of this report.

Size of Establishment.--Table 4 shows general statistics for establishments classified by size, as measured by number of employees. This is the sum of statistics for individual States or districts and represents approximately the size of oil and gas field operations of each company in that State or district, since, in general, each establishment report represents all operations of a company in the State or district. However, separate reports were usually furnished by parent and subsidiary companies. If both operated in the same State or district, they would be included separately in this tabulation.

At the request of other government agencies and business groups, certain tabulations have been made for this industry for 1967 and earlier years which classify operating companies in terms of size as measured by value of shipments. These statistics are shown in table 8A. For this table, all reports for a parent company and its subsidiaries have been combined.

In both of these tables, it must be emphasized that the measures are of size of company as an operator of oil and gas field properties, including properties operated by the company for the account of others. No information is available from the 1967 census to measure size of company as an owner of oil and gas properties.

County Statistics.--General statistics by county were completed for each establishment by allocating the reported totals on the basis of the reported county figures. All employment, payroll, and man-hour figures were allocated on the basis of the reported March 12 employment. Other allocated figures were based on "Value of shipments and receipts" by county and on capital expenditures. "Value of shipments and receipts" was estimated by county by multiplying the average unit values of crude petroleum and natural gas indicated by reported figures for each establishment by the reported county quantity figures and adding these estimated total values of oil and gas for each county to the reported receipts for services. These county figures together with counts of "county establishments" are shown in table 2B.

Secondary Production.--The general statistics (employment, payroll, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product, drilling, and number of wells statistics (tables 6A to 6E) showing shipments and related statistics for all industries of the primary products and related activities of the specified industry. The extent of the "product mix" is indicated in table 5A which shows the value of primary and secondary products shipped by establishments classified in the specified industry or subindustry and also the value of primary products of the industry produced as secondary products by establishments classified in other industries.

Comparability With Bureau of Mines Statistics.--The Bureau of the Census excludes single unit establishments with no paid employees. In the 1967 census, establishments with less than 5 employees accounted for 67 percent of all establishments, representing 7 percent of the total value of shipments and receipts for the industry, 12 percent of all

capital expenditures, and probably a higher percentage of total contract expenditures since many such establishments drilled dry holes for which the costs would not be capitalized. The large number of small operations and the prevalence of operation of properties or drilling for oil and gas under short-term agreements and joint ventures in widely scattered areas make coverage of this industry by the usual census techniques particularly difficult. The coverage of production, shipments, and operating costs for the Crude Petroleum and Natural Gas Industry in the 1967 census is probably slightly lower than in most other areas of the economic censuses. However, the census is the only attempt by any federal or private organization to obtain complete coverage statistics directly from oil and gas field operators. All totals from other sources for such activities represent figures developed from a relatively small sample of reports, primarily from large companies, or from secondary source reports, such as for pipe line runs and productive wells connected to pipe lines.

Table A shows a comparison of quantity and value figures for petroleum and natural gas as published by the Bureau of the Census and the Bureau of Mines. As indicated in the footnotes to this table, the differences between the two sets of figures are only partly due to coverage and partly to some differences in level of collection of the products data.

Table A. 1967 BUREAU OF THE CENSUS FIGURES FOR QUANTITY AND VALUE OF PRODUCTS COMPARED WITH BUREAU OF MINES FIGURES

Product	Unit of measure	Bureau of Census statistics			Bureau of Mines statistics		
		Production (quantity)	Shipments (including interplant transfers)		Production (quantity)	Shipments	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
Crude petroleum, including field condensate and drips.....	Million barrels	¹ 3,064.8	3,057.4	8,841.7	3,215.0	(NA)	² 9,375.0
Natural gas.....	Billion cu. ft.	19,308.9	17,185.1	2,898.5	20,251.0	³ 18,171.0	³ 2,898.7

(NA) Not available.

¹Represents crude petroleum shipped plus crude petroleum produced and used at the same establishment in lease operations.

²Represents value of production.

³Represents marketed production, "comprising gas sold or consumed by producers, including losses in transmission, amounts added to storage, and increases in gas in pipe lines." Census figures show 640.5 Billion cubic feet of gas produced and used in the same establishment in lease operations and net increase in underground storage of 2.5 Billion cubic feet; these figures are not included in the Census shipments figures shown.

The following tables are being issued in a special supplemental report titled, Crude Petroleum and Natural Gas MIC67-13A (Supp.):

Table 6E. Number of Wells Operated by Geographic Area: 1967

Table 8A. Detailed Statistics (Including Company Exploration Expenditure and Asset For 1967) For Operating Companies Ranked by Value of Company Shipments and Receipts: 1967 and 1963

Table 8B. Detailed Statistics (Including Company Exploration Expenditure and Asset) For All Companies by Geographic Area: 1967

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments ¹		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS								
1967, total ⁴	5,482	8,796	1,034	126.4	1,049.1	66.2	130.0	440.3
Crude petroleum subindustry.....	(NA)	7,278	856	106.8	901.7	54.9	107.7	365.6
Natural gas subindustry.....	(NA)	1,518	178	19.6	147.4	11.2	22.3	74.7
1963, total.....	10,594	14,378	954	145.2	1,016.4	83.4	166.3	494.9
Crude petroleum subindustry.....	9,384	12,326	789	125.8	892.6	71.7	142.8	426.8
Natural gas subindustry.....	1,628	2,052	165	19.4	123.8	11.7	23.5	68.1
1958, total.....	9,852	12,010	1,093	180.1	1,043.1	102.5	201.0	497.9
Crude petroleum subindustry.....	8,781	10,620	975	164.8	966.8	92.4	181.3	453.2
Natural gas subindustry.....	1,241	1,390	118	15.3	76.3	10.1	19.7	44.6
1954, total ⁵	9,720	11,508	1,042	172.5	835.7	109.8	216.6	460.0
Crude petroleum subindustry ⁵	8,565	10,101	(NA)	161.3	790.9	101.5	201.1	430.5
Natural gas subindustry.....	1,290	1,407	(NA)	11.2	44.8	8.3	15.5	29.5
1939 ⁵	8,061	8,605	(NA)	136.1	234.9	105.5	190.7	155.7
1919 ^{5 6}	(NA)	9,970	(NA)	111.6	169.3	93.7	(NA)	135.4
1909 ⁶	8,053	8,202	(NA)	44.0	35.6	37.6	(NA)	28.1
1902.....	31,736	(NA)	(NA)	27.6	21.3	⁸ 22.4	(NA)	16.4
1889.....	(NA)	(NA)	(NA)	29.2	10.3	26.9	(NA)	8.7
1880.....	(NA)	(NA)	(NA)	11.5	7.2	(NA)	(NA)	(NA)
1870.....	(NA)	2,314	(NA)	4.5	4.0	(NA)	(NA)	(NA)
1860 ¹¹	(NA)	64	(NA)	0.9	0.3	(NA)	(NA)	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Figures for 1967 and 1963 and earlier years are not entirely comparable. Prior to 1963, each report (establishment) represented all operations in an entire state. For 1967 and 1963, companies filed separate establishment reports by districts for Louisiana, Texas, and New Mexico. For 1967, companies also filed separate establishment reports for offshore operations by State and for districts in California. In addition, in 1967, single unit establishments without paid employees were excluded from the Census.

²Includes the cost of gas purchased for gas lift and repressuring and the cost of products purchased for resale.

³For 1967, 1963, 1958, and 1954, represents shipments of crude petroleum, field condensate, and drips plus crude petroleum produced and used in lease operations for power and heat or other purposes.

⁴In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, there were 3,131 establishments without paid employees in this industry; however, they accounted for less than 3 percent of this industry's value added.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year	Value added in mining (million dollars)	Selected expenses			Value of shipments and receipts (million dollars)	Production of primary products		Capital expenditures (million dollars)
		Supplies and purchased fuels and electric energy ² (million dollars)	Contract work (million dollars)	Purchased machinery installed (million dollars)		Crude petroleum, field condensate, and drips ³ (million barrels)	Natural gas (billion cu. ft.)	
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued								
1967, total ⁴	10,965.0	1,298.5	1,519.8	490.0	11,731.7	3,043.7	17,126.1	2,541.6
Crude petroleum subindustry.....	8,943.0	1,083.7	1,286.3	401.8	9,648.7	2,809.5	9,118.9	2,066.1
Natural gas subindustry.....	2,022.1	214.7	233.6	88.2	2,082.9	234.3	8,007.3	475.6
1963, total.....	9,016.4	1,179.5	1,486.5	421.3	9,893.8	2,689.0	15,896.0	2,209.9
Crude petroleum subindustry.....	7,813.0	1,036.7	1,285.7	371.3	8,600.1	2,588.0	9,391.0	1,906.5
Natural gas subindustry.....	1,203.4	142.9	200.8	50.0	1,293.7	101.0	6,505.0	303.4
1958, total.....	⁵ 7,339.9	1,055.0	1,455.3	486.9	⁵ 8,385.9	⁵ 2,353.0	12,085.0	1,947.6
Crude petroleum subindustry.....	⁵ 6,823.3	931.4	1,326.1	444.0	⁵ 7,809.9	⁵ 2,307.0	8,860.0	1,711.4
Natural gas subindustry.....	516.6	123.6	129.2	42.9	576.0	46.0	3,225.0	236.3
1954, total ⁵	6,129.2	759.5	1,458.8	621.0	7,070.1	2,201.0	10,085.0	1,898.5
Crude petroleum subindustry ⁵	5,741.3	711.2	1,372.5	588.2	6,642.5	2,172.0	7,386.0	1,770.7
Natural gas subindustry.....	388.0	48.3	86.3	32.8	427.6	29.0	2,699.0	127.8
1939 ⁵	1,072.0	104.9	199.0	(NA)	1,376.0	1,229.0	2,929.0	(NA)
1919 ⁵ ⁶	613.7	247.9	70.1	(NA)	931.8	350.0	⁷ 727.0	(NA)
1909 ⁶	111.9	56.4	17.1	(NA)	185.4	172.0	⁷ 432.0	(NA)
1902.....	59.0	25.0	18.3	(NA)	102.3	89.0	⁷ 206.0	(NA)
1889.....	15.3	22.7	(NA)	(NA)	38.0	35.0	⁷ 552.0	(NA)
1880.....	17.7	⁹ 3.2	¹⁰ 3.7	(NA)	24.6	26.0	(NA)	(NA)
1870.....	17.9	1.4	(NA)	(NA)	19.3	4.0	(NA)	(NA)
1860 ¹¹	2.1	2.2	(NA)	(NA)	4.3	1.0	(NA)	(NA)

⁵Excludes Alaska: For 1958, figures for 17 establishments; for 1954, figures for 5 establishments; for 1919, figures for 1 establishment.⁶Includes statistics for the Natural Gas Liquids Industry.⁷For 1919, 1909, and 1889, represents the sum of gas sold and gas used by producers and excludes gas wasted at well locations. For 1902, it is not clear whether the figure represents only gas sold or includes also gas used by producers.⁸Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.⁹Represents the cost of drive-pipe, casing, tubing, and torpedoes.¹⁰Represents "cost of drilling." It was indicated in the 1880 report that drilling was usually done by contractors.¹¹These figures were reported as "oil, coal" and probably include some refining as well as production of crude petroleum, or may represent primarily the recovery of oil from coal. The figure for quantity of crude petroleum produced is an estimate by the United States Geological Survey. That agency estimated the corresponding value of crude petroleum as \$4,800 thousand.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS													
Geographic Area													
United States, total.....	8,796	1,034	126.4	1,049.1	66.2	130.0	440.3	10,965.0	3,308.3	11,731.7	2,541.6	145.2	9,016.4
Offshore.....	99	27	3.1	29.7	2.3	5.1	20.6	1,385.4	759.2	1,361.3	783.3	(NA)	(NA)
Crude petroleum subindustry....	7 278	856	106.8	901.7	54.9	107.7	365.6	8,943.0	2,771.8	9,648.7	2,066.1	125.8	7,813.0
Natural gas subindustry.....	1,518	178	19.6	147.7	11.2	22.3	74.7	2,022.1	536.5	2,082.9	475.6	19.4	1,203.4
Northeast, total.....	470	34	3.3	23.5	2.2	4.4	11.4	46.3	17.3	53.5	10.1	4.7	50.4
Crude petroleum subindustry.....	351	21	2.1	15.5	1.3	2.4	6.1	24.0	9.1	29.0	4.1	2.4	24.9
Natural gas subindustry.....	119	13	1.2	8.0	0.9	2.0	5.3	22.3	8.2	24.5	6.0	2.3	22.5
New York.....	98	11	0.7	6.9	0.3	0.6	1.4	8.0	2.1	8.9	1.3	10.9	8.0
Pennsylvania.....	364	23	2.6	16.6	1.9	3.9	10.0	38.6	14.6	44.6	8.7	3.8	42.4
Crude petroleum subindustry.....	258	12	1.5	9.9	1.1	2.0	4.9	18.0	6.6	21.5	3.0	1.8	18.1
Natural gas subindustry.....	106	11	1.1	6.7	0.9	1.9	5.1	20.6	8.0	23.0	5.6	2.1	24.4
East North Central Division, total.....	818	65	5.8	37.4	4.3	7.8	23.9	213.0	76.9	247.4	42.6	8.0	277.4
Crude petroleum subindustry.....	748	61	5.4	35.4	4.1	7.4	22.5	199.4	71.7	235.2	35.8	7.6	27.0
Natural gas subindustry.....	70	4	0.4	2.1	0.3	0.4	1.4	13.6	5.3	12.2	6.7	0.4	1.5
Illinois.....	304	38	3.2	20.2	2.6	4.7	14.8	142.6	44.5	164.7	22.4	4.3	186.9
West North Central Division, total.....	681	86	7.1	48.4	4.5	8.7	25.5	394.6	124.3	459.7	59.2	8.5	455.9
Crude petroleum subindustry.....	623	78	5.7	36.6	4.1	7.8	22.4	298.2	112.4	357.3	53.3	7.6	380.8
Natural gas subindustry.....	58	8	1.4	11.8	0.4	0.9	3.1	96.4	11.9	102.4	5.9	0.9	75.1
North Dakota.....	58	3	0.5	3.3	0.3	0.6	2.1	51.8	26.8	63.3	15.4	0.4	55.0
Kansas.....	521	76	5.3	33.4	4.0	7.7	22.0	319.2	88.0	366.5	40.7	7.4	350.7
South Atlantic Division, total.....	584	20	2.8	17.2	2.1	4.0	9.9	71.7	28.3	76.4	23.7	3.4	52.1
Crude petroleum subindustry.....	286	8	1.1	7.1	0.8	1.6	3.6	12.2	10.6	16.7	6.2	1.6	10.2
Natural gas subindustry.....	298	12	1.7	10.0	1.3	2.3	6.3	59.5	17.6	59.7	17.5	1.9	41.9
East South Central Division, total.....	331	39	3.5	23.9	2.5	5.1	14.5	217.4	78.4	239.6	56.1	4.6	237.3
Crude petroleum subindustry.....	289	34	2.6	18.3	1.8	3.8	10.5	178.8	70.0	200.4	48.3	3.7	218.1
Natural gas subindustry.....	42	5	0.9	5.5	0.7	1.3	4.0	38.6	8.4	39.2	7.8	0.9	19.2
Kentucky.....	189	16	1.9	10.6	1.6	3.0	8.0	51.6	13.4	54.3	10.6	2.6	58.8
Mississippi.....	107	22	1.5	12.5	0.9	1.9	6.0	147.7	60.0	164.9	42.8	1.9	162.8
West South central Division, total.....	4,667	593	80.0	690.4	38.1	75.4	262.5	7,912.1	2,165.4	8,426.4	1,651.1	91.0	6,060.0
Offshore.....	51	16	2.3	20.5	1.9	4.1	16.1	1,144.5	533.5	1,168.2	509.8	(NA)	(NA)
Crude petroleum subindustry.....	3,919	481	68.8	599.6	32.0	63.0	218.9	6,362.6	1,747.7	6,790.2	1,320.1	80.7	5,150.8
Natural gas subindustry.....	748	112	11.5	90.8	6.0	12.3	43.5	1,549.5	417.7	1,636.2	331.0	10.3	909.2
Arkansas.....	127	9	0.7	4.7	0.5	1.0	3.1	68.0	15.4	69.4	14.0	1.2	58.5
Louisiana, total.....	522	116	18.4	166.3	10.3	21.4	80.5	3,223.0	976.9	3,349.4	850.4	17.1	2,107.2
Crude petroleum subindustry.....	366	72	14.3	132.1	7.8	16.1	60.9	2,435.8	741.7	2,503.1	674.3	14.3	1,719.3
Natural gas subindustry.....	156	44	4.1	34.2	2.5	5.3	19.6	787.2	235.2	846.3	176.0	2.8	387.9
North Louisiana.....	248	39	3.0	22.7	2.0	4.1	13.1	200.8	47.0	212.9	35.0	3.1	208.9
Crude petroleum subindustry.....	195	25	2.1	15.3	1.6	3.2	10.1	124.2	33.4	131.2	26.4	2.4	150.1
Natural gas subindustry.....	53	14	0.9	7.4	0.4	0.9	3.0	76.6	13.7	81.7	8.7	0.7	58.8
South and offshore Louisiana.....	274	77	15.3	143.6	8.3	17.3	67.4	3,022.1	929.8	3,136.6	815.4	14.0	1,898.3
Oklahoma, total.....	918	103	16.1	132.7	7.1	13.5	44.5	758.0	227.9	828.3	157.6	18.6	627.4
Crude petroleum subindustry.....	839	98	15.3	126.7	6.6	12.7	41.8	635.5	208.0	201.7	141.7	17.9	561.0
Natural gas subindustry.....	79	5	0.8	6.0	0.4	0.8	2.7	122.6	19.9	126.6	15.9	0.7	66.4
Texas, total.....	3,100	365	45.0	386.7	20.2	39.5	134.3	3,863.1	945.2	4,179.3	629.0	54.1	3,267.0
Crude petroleum subindustry.....	2,607	303	38.5	336.7	17.1	33.4	113.4	3,245.9	787.3	3,536.8	496.4	47.4	2,821.2
Natural gas subindustry.....	493	62	6.5	50.0	3.1	6.1	20.9	617.2	157.9	642.5	132.6	6.7	445.8
Texas Gulf Coast A and offshore....	392	80	12.2	123.4	3.1	6.4	21.8	653.2	151.8	692.8	112.2	214.8	2548.6
Texas Gulf Coast B.....	174	19	1.3	9.7	1.0	2.1	7.3	266.3	45.5	282.3	29.4	21.6	2233.2
Crude petroleum subindustry.....	96	13	0.8	6.8	0.6	1.4	5.2	200.1	33.0	210.6	22.4	20.9	2141.1
Natural gas subindustry.....	78	6	0.5	2.9	0.3	0.7	2.1	66.2	12.5	71.7	7.0	20.7	292.1
South Texas.....	226	33	3.4	29.2	1.8	3.6	12.9	498.5	101.3	511.3	88.5	23.9	2342.7
Crude petroleum subindustry.....	151	21	2.3	19.8	1.1	2.2	8.1	339.1	55.5	348.1	46.6	22.9	2259.4
Natural gas subindustry.....	75	12	1.2	9.4	0.7	1.3	4.8	159.4	45.8	163.2	41.9	21.0	283.3

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
West South Central Division--Con.													
Southwest Texas.....	188	12	1.1	7.6	0.7	1.3	4.9	64.5	18.8	68.5	14.8	1.3	64.2
Crude petroleum subindustry.....	159	11	0.9	6.8	0.6	1.2	3.9	46.2	14.0	47.7	12.5	1.2	43.5
Natural gas subindustry.....	29	1	0.1	0.8	0.1	0.2	0.6	18.2	4.9	20.8	2.3	0.1	20.6
North Central Texas A.....	412	36	2.9	18.1	2.3	4.5	12.7	154.1	54.4	182.3	26.2	3.9	177.9
Crude petroleum subindustry.....	386	33	2.8	16.8	2.2	4.2	12.0	136.1	48.5	162.7	21.9	3.7	162.0
Natural gas subindustry.....	26	3	0.2	1.3	0.1	0.3	0.6	18.0	5.9	19.6	4.3	0.2	15.9
North Central Texas B.....	272	15	1.5	9.8	1.1	2.2	6.7	90.9	26.7	103.9	13.7	2.4	120.3
Crude petroleum subindustry.....	249	14	1.4	9.3	1.0	2.1	6.4	84.6	25.1	97.4	12.3	2.3	115.1
Natural gas subindustry.....	23	1	0.1	0.5	0.1	0.1	0.3	6.2	1.6	6.5	1.3	0.1	5.2
East Texas A.....	276	31	5.5	51.1	0.8	1.2	2.9	85.8	19.5	89.7	15.6	5.5	92.0
Crude petroleum subindustry.....	240	29	5.4	50.5	0.7	1.1	2.6	60.0	12.9	63.1	9.8	5.4	86.0
Natural gas subindustry.....	36	2	0.1	0.6	0.1	0.2	0.4	25.8	6.7	26.6	5.8	0.1	6.0
East Texas B.....	355	35	3.0	21.0	2.0	4.0	12.9	356.2	55.7	380.5	31.4	4.1	295.2
Crude petroleum subindustry.....	315	32	2.8	19.6	1.9	3.7	12.0	333.0	51.5	355.2	29.2	3.7	247.6
Natural gas subindustry.....	40	3	0.2	1.4	0.1	0.3	0.9	23.2	4.2	25.3	2.2	0.4	47.6
West Texas A.....	461	63	10.9	93.7	5.2	10.2	38.4	1,320.8	349.8	1,460.8	209.8	12.6	1,088.9
Crude petroleum subindustry.....	430	59	9.3	81.3	5.0	9.7	36.6	1,275.3	332.9	1,408.3	199.9	11.4	1,065.6
Natural gas subindustry.....	31	4	1.6	12.4	0.2	0.5	1.8	45.5	16.9	52.5	9.8	1.3	23.3
West Texas B.....	157	12	0.8	5.9	0.6	1.2	4.3	165.7	67.0	185.0	47.8	0.9	105.1
Crude petroleum subindustry.....	140	9	0.7	5.2	0.6	1.1	4.0	157.0	63.5	177.5	43.0	0.9	100.4
Natural gas subindustry.....	17	3	0.1	0.7	(Z)	0.1	0.3	8.7	3.5	7.4	4.8	(Z)	4.7
Texas Panhandle.....	187	29	2.3	17.1	1.5	2.8	9.8	207.2	54.7	222.2	39.7	3.0	199.0
Crude petroleum subindustry.....	129	15	1.1	7.9	0.2	1.3	4.3	67.8	28.9	81.5	15.2	2.0	94.8
Natural gas subindustry.....	58	14	1.2	9.2	0.8	1.5	5.5	139.4	25.8	140.7	24.5	1.0	104.1
Mountain Division, total.....	769	99	9.0	76.2	4.7	9.3	33.2	1,051.7	318.1	1,134.0	235.7	11.5	969.3
Crude petroleum subindustry.....	634	84	7.2	63.4	3.6	7.1	25.5	937.3	298.9	1,017.7	198.6	9.4	886.7
Natural gas subindustry.....	135	15	1.7	12.8	1.1	2.1	7.7	114.3	39.1	116.4	37.1	2.1	82.6
Montana.....	107	8	0.6	4.5	0.4	0.8	2.7	75.0	28.5	80.8	22.7	1.1	59.0
Wyoming.....	149	26	2.1	18.2	1.2	2.4	9.5	359.5	102.2	399.7	61.9	2.9	334.3
Colorado.....	165	28	2.6	26.9	0.7	1.4	5.7	94.3	35.6	104.5	25.5	2.7	109.9
New Mexico.....	264	31	3.3	23.7	2.1	4.1	13.4	447.3	124.0	470.3	101.0	4.2	376.3
Crude petroleum subindustry.....	198	29	2.2	16.7	1.4	2.8	8.9	359.9	101.5	386.4	75.1	2.9	322.1
Natural gas subindustry.....	66	2	1.1	7.0	0.7	1.4	4.5	87.4	22.5	83.9	25.9	1.3	54.1
West New Mexico.....	68	7	1.2	8.1	0.7	1.5	4.8	92.0	24.3	91.2	25.2	1.5	73.8
Crude petroleum subindustry.....	24	5	0.2	1.4	0.1	0.2	0.5	12.9	4.5	15.5	1.8	0.3	25.2
Natural gas subindustry.....	44	2	1.0	6.7	0.6	1.3	4.2	79.2	19.8	75.6	23.4	1.2	48.5
East New Mexico.....	196	24	2.1	15.5	1.3	2.6	8.6	355.2	99.7	379.2	75.8	2.7	302.5
Crude petroleum subindustry.....	174	24	2.0	15.3	1.3	2.6	8.4	347.1	97.1	370.8	73.3	2.6	296.9
Natural gas subindustry.....	22	0	(Z)	0.3	(Z)	0.1	0.2	8.2	2.6	8.3	2.5	0.1	5.6
Pacific Division, total.....	475	98	14.6	132.2	7.6	15.3	59.4	1,058.3	499.6	1,094.6	463.3	13.5	914.0
Offshore.....	31	11	0.8	9.2	0.5	1.0	4.4	242.7	223.3	193.0	272.9	(NA)	(NA)
Crude petroleum subindustry.....	429	89	13.8	125.8	7.1	14.4	56.2	930.4	471.5	1,002.1	399.8	12.9	874.3
Natural gas subindustry.....	47	9	0.8	6.4	0.5	0.9	3.2	127.8	28.1	92.5	63.4	0.6	39.7
California, total.....	429	90	14.1	126.1	7.4	14.9	57.0	906.3	367.0	998.6	274.7	13.2	885.9
Crude petroleum subindustry.....	384	82	13.4	120.4	7.0	14.1	54.2	816.2	350.8	915.6	251.5	(NA)	(NA)
Natural gas subindustry.....	45	8	0.7	5.7	0.4	0.9	2.8	90.1	16.2	83.0	23.2	(NA)	(NA)
East Central California.....	119	24	5.3	43.9	3.1	6.3	23.7	346.0	100.2	368.5	77.8	(NA)	(NA)
Central Coastal California.....	49	12	1.5	13.1	1.2	2.6	9.7	142.6	36.0	150.6	28.0	(NA)	(NA)
South California.....	200	41	6.2	57.6	2.6	5.0	19.2	228.0	104.6	277.0	55.6	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued													
Type of Operation													
United States, total.....	8,796	1,034	126.4	1,049.1	66.2	130.0	440.3	10,964.0	3,308.0	11,730.5	2,541.5	145.2	9,016.4
Producing Operations, total....	8,449	1,019	125.1	1,037.4	65.7	129.1	437.2	10,988.0	3,194.3	11,730.5	2,452.0	143.2	9,049.8
With drilling.....	2,204	640	73.1	587.1	49.3	99.9	357.4	9,889.6	2,980.2	10,541.1	2,328.9	119.8	8,214.7
Without drilling.....	2,620	135	14.3	90.9	10.1	19.8	57.3	950.9	167.4	1,037.7	80.8	23.4	835.0
Undistributed.....	3,625	244	37.7	359.4	6.2	9.4	22.4	147.5	46.5	151.6	42.4	-	-
Oil well operations only, total.....	2,494	207	19.9	130.4	14.9	29.6	87.3	1,334.0	497.7	1,488.7	343.2	32.4	1,393.1
With drilling.....	904	147	12.4	87.1	9.3	18.8	58.3	960.9	420.6	1,069.2	312.4	18.1	942.5
Without drilling.....	1,590	60	7.5	43.3	5.6	10.8	29.0	373.1	77.1	419.5	30.8	14.3	450.6
Oil and gas well operations, total.....	1,803	525	63.3	518.6	41.9	84.4	309.8	9,193.6	2,557.4	9,763.7	1,987.3	105.4	7,374.7
With drilling.....	1,163	463	58.0	480.4	38.3	77.5	287.4	8,733.6	2,483.5	9,265.2	1,951.9	98.7	7,049.0
Without drilling.....	640	62	5.3	38.2	3.6	6.9	22.4	460.0	73.9	498.5	35.4	6.7	325.7
Gas well operations only, total.....	527	43	4.2	28.9	2.7	5.7	17.6	314.1	92.8	327.7	79.3	5.4	282.0
With drilling.....	137	30	2.7	19.6	1.7	3.6	11.7	196.3	76.4	208.0	64.8	3.0	223.3
Without drilling.....	390	13	1.5	9.3	1.0	2.1	5.9	117.8	16.4	119.7	14.5	2.4	58.8
Nonproducing operations.....	347	15	1.3	11.7	0.5	0.9	3.1	(⁵)	113.8	-	89.5	2.1	(⁵)
East North Central Division, total.....	818	65	5.8	37.4	4.3	7.8	23.9	213.0	76.9	247.4	42.6	8.0	277.4
Producing operations, total.....	801	64	5.7	37.2	4.3	7.8	23.7	213.5	76.1	247.4	42.2	7.8	280.7
With drilling.....	171	43	3.4	22.7	2.7	5.1	16.7	157.1	63.0	185.7	34.5	5.8	237.9
Without drilling.....	176	13	1.2	6.4	1.0	1.7	4.7	42.5	8.5	47.7	3.4	1.9	42.7
Undistributed.....	454	8	1.2	8.1	0.6	0.9	2.4	13.9	4.5	14.0	4.4	-	-
Oil well operations only.....	269	42	3.6	22.6	2.9	5.5	16.8	159.8	52.8	187.5	25.1	4.7	155.4
With drilling.....	128	32	2.6	17.6	2.1	4.0	13.0	132.0	46.0	155.6	22.4	3.1	115.3
Without drilling.....	141	10	1.0	5.0	0.8	1.5	3.8	27.8	6.8	31.9	2.7	1.7	40.1
Oil and gas well operations.....	54	12	0.8	5.3	0.6	1.1	3.8	35.5	17.1	41.8	10.9	2.8	121.7
With drilling.....	38	10	0.7	4.7	0.5	1.0	3.4	22.9	15.6	28.2	10.4	2.6	119.9
Without drilling.....	16	2	0.1	0.6	0.1	0.1	0.4	12.6	1.5	13.6	0.5	0.2	1.8
Gas well operations, only.....	24	2	0.2	1.1	0.2	0.2	0.8	4.3	1.6	4.2	1.8	0.2	3.5
With drilling.....	5	1	0.1	0.4	0.1	0.1	0.3	2.2	1.4	2.0	1.7	0.2	2.7
Without drilling.....	19	1	0.1	0.7	0.1	0.1	0.5	2.1	0.2	2.2	0.1	0.1	0.8
Nonproducing operations.....	17	1	0.1	0.2	0.1	(²)	0.2	(⁵)	0.9	-	0.4	0.2	(⁵)
West North Central Division.....	681	86	7.1	48.4	4.5	8.7	25.5	394.6	124.3	459.7	59.2	8.5	455.9
Producing operations, total.....	662	85	7.0	48.1	4.5	8.7	25.4	395.1	123.2	459.7	58.6	8.2	458.3
With drilling.....	222	70	4.5	29.8	3.4	6.8	20.3	313.6	104.3	368.6	49.2	7.0	407.2
Without drilling.....	190	6	0.9	4.8	0.7	1.3	3.5	73.0	15.8	81.6	7.2	1.3	51.1
Undistributed.....	250	8	1.7	13.5	0.4	0.6	1.6	8.6	3.1	9.5	2.2	-	-
Oil well operations, only.....	254	22	1.6	9.1	1.3	2.6	6.7	74.8	32.5	89.7	17.5	3.2	153.2
With drilling.....	119	19	1.1	6.4	0.9	1.8	4.7	49.6	25.4	60.6	14.3	2.2	118.8
Without drilling.....	135	3	0.5	2.7	0.4	0.8	2.1	25.2	7.1	29.1	3.2	1.0	34.3
Oil and gas well operations.....	133	53	2.6	24.5	2.7	5.3	16.6	284.2	83.9	332.3	35.9	4.9	284.0
With drilling.....	101	52	3.4	23.4	2.5	5.0	15.6	263.7	78.9	307.7	34.9	4.6	273.5
Without drilling.....	32	1	0.2	1.1	0.2	0.3	1.0	20.5	5.0	24.6	1.0	0.2	10.5
Gas well operations, only.....	25	2	0.1	0.9	0.1	0.2	0.5	27.6	3.6	28.2	3.0	0.2	21.1
Kansas.....	521	76	5.3	33.4	4.0	7.7	22.0	319.2	88.0	366.5	40.7	7.4	350.7
Producing operations only, total....	515	76	5.3	33.3	4.0	7.7	21.9	319.5	87.5	366.5	40.4	7.3	351.5
With drilling.....	182	66	4.0	26.0	3.1	6.0	17.7	255.2	74.8	297.4	32.6	6.1	307.6
Without drilling.....	126	5	0.7	3.7	0.5	1.0	2.8	56.7	9.8	60.8	5.8	1.2	43.9
Undistributed.....	207	5	0.6	3.7	0.4	0.6	1.4	7.6	2.7	8.4	2.0	-	-
Oil well operations only.....	160	19	1.4	7.1	1.1	2.1	5.0	43.6	18.8	53.3	9.2	2.8	93.0
Oil and gas well operations.....	120	50	3.2	21.8	2.5	4.8	14.9	240.7	62.2	276.7	26.3	(NA)	(NA)
With drilling.....	96	49	3.0	20.8	2.3	4.5	14.1	224.5	60.0	258.8	25.8	4.1	227.6
Without drilling.....	24	1	0.2	1.0	0.2	0.3	0.8	16.2	2.2	17.9	0.5	(NA)	(NA)
Gas well operations only.....	24	2	0.1	0.9	0.1	0.2	0.5	27.6	3.6	28.2	3.0	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
South Atlantic Division.....	584	20	2.8	17.2	2.1	4.0	9.9	71.7	28.3	76.4	23.7	3.4	52.1
Producing operations, total.....	564	20	2.8	17.1	2.1	3.9	9.9	73.8	(D)	76.3	(D)	3.2	53.3
With drilling.....	57	13	1.9	11.2	1.4	2.9	7.5	60.2	21.8	62.8	19.2	2.3	40.6
Without drilling.....	76	3	0.3	1.2	0.2	0.5	1.0	7.2	(D)	7.5	(D)	0.9	12.7
Undistributed.....	431	4	0.6	4.6	0.4	0.5	1.3	6.4	(D)	6.1	(D)	-	-
Oil well operations, only.....	26	1	0.1	0.5	0.1	0.2	0.4	3.8	1.8	5.1	0.6	0.4	3.5
Oil and gas well operations.....	44	11	1.3	7.2	1.1	2.2	5.4	32.9	12.0	37.1	7.8	1.7	18.4
With drilling.....	34	9	1.2	6.8	1.0	2.1	5.1	32.2	11.7	36.2	7.7	1.5	15.8
Without drilling.....	10	2	0.1	0.4	0.1	0.1	0.3	0.7	0.3	0.9	0.1	0.3	2.6
Gas well operations, only.....	63	4	0.8	4.8	0.5	1.0	2.7	30.6	9.6	28.2	12.0	1.1	31.4
East South Central Division, total.....	331	39	3.5	23.8	2.5	5.1	14.5	217.4	78.4	239.6	56.1	4.6	237.3
Producing operations, total.....	309	37	3.4	23.1	2.5	4.9	14.3	218.2	76.8	239.6	55.4	4.5	239.8
With drilling.....	84	30	2.6	17.7	1.9	3.9	11.9	171.6	68.9	188.9	51.6	3.6	200.7
Without drilling.....	92	1	0.4	2.5	0.3	0.8	1.7	41.9	6.7	46.7	2.0	0.9	39.1
Undistributed.....	133	6	0.4	2.9	0.2	0.3	0.9	4.6	1.3	4.0	1.9	-	-
Oil well operations, only.....	123	10	0.8	5.4	0.7	1.5	4.0	61.4	23.3	72.3	12.5	1.7	82.3
Oil and gas well operations.....	43	20	2.0	14.1	1.4	3.0	9.1	139.8	50.8	151.6	39.0	2.6	150.7
With drilling.....	32	20	2.0	13.8	1.4	2.9	8.9	132.4	50.2	143.7	38.9	2.6	148.5
Without drilling.....	11	0	(Z)	0.3	(Z)	0.1	0.2	7.4	0.6	7.9	0.1	(Z)	2.4
Gas well operations, only.....	10	1	0.1	0.7	0.1	0.2	0.5	12.3	1.4	11.7	2.1	0.2	6.8
Nonproducing operations.....	22	2	0.1	0.8	0.1	0.2	0.1	(⁵)	1.5	-	0.7	0.1	(⁵)
West South Central Division, total.....	4,667	593	80.3	690.4	38.1	75.4	262.5	7,912.1	2,165.4	8,426.4	1,651.1	91.0	6,060.0
Producing operations, total.....	4,528	588	79.6	684.8	37.9	75.0	261.2	7,920.1	2,125.9	8,426.4	1,619.8	90.3	6,073.4
With drilling.....	1,250	342	43.6	362.5	28.8	58.6	215.5	7,176.4	1,995.5	7,628.9	1,543.1	76.7	5,490.7
Without drilling.....	1,623	80	8.8	55.0	6.1	11.9	34.7	659.7	104.4	713.2	50.9	13.6	582.7
Undistributed.....	1,655	166	27.3	267.2	2.9	4.5	10.9	84.1	25.9	84.2	25.8	-	-
Oil wells, only.....	1,358	72	8.1	46.7	6.1	12.0	31.4	412.8	133.0	464.6	81.2	15.2	588.5
With drilling.....	425	43	4.0	24.4	3.0	6.1	16.0	186.9	93.2	215.7	64.4	7.1	316.2
Without drilling.....	933	29	4.1	22.3	3.1	5.9	15.4	225.9	39.8	248.9	16.8	8.1	272.3
Oil and gas wells.....	1,245	333	43.0	362.3	28.1	56.9	214.2	7,302.7	1,919.1	7,744.4	1,477.6	73.8	5,318.6
With drilling.....	758	288	39.0	333.7	25.4	51.7	197.1	6,927.5	1,861.8	7,340.5	1,448.9	68.8	5,043.7
Without drilling.....	487	45	4.0	28.6	2.7	5.2	17.1	375.2	57.3	403.9	28.7	5.0	274.9
Gas wells, only.....	270	17	1.3	8.6	0.8	1.6	4.7	120.6	47.8	133.1	35.3	1.3	166.4
With drilling.....	67	11	0.6	4.4	0.4	0.8	2.4	62.0	40.5	72.7	29.8	0.8	130.9
Without drilling.....	203	6	0.7	4.2	0.4	0.8	2.3	58.6	7.3	60.4	5.5	0.5	35.5
Nonproducing operations.....	139	5	0.7	5.6	0.2	0.4	1.3	(⁵)	39.5	-	31.3	0.7	(⁵)
Arkansas.....	127	9	0.7	4.7	0.5	1.0	3.1	68.0	15.4	69.4	14.0	1.2	58.5
Producing operations, total.....	119	9	0.7	4.6	0.5	1.0	3.0	68.0	15.1	69.4	13.7	1.2	60.5
With drilling.....	27	5	0.4	3.0	0.3	0.5	1.8	44.6	12.3	45.0	12.0	0.8	38.5
Without drilling.....	51	2	0.2	1.0	0.2	0.3	0.8	20.6	1.8	21.4	1.0	0.3	22.0
Undistributed.....	41	2	0.1	0.6	0.1	0.2	0.5	2.8	1.0	3.1	0.8	-	-
Oil wells operations, only.....	48	2	0.2	1.3	0.2	0.4	1.0	19.4	2.9	20.8	1.5	(NA)	(NA)
Oil and gas well operations.....	14	4	0.3	2.2	0.2	0.4	1.3	27.5	8.3	28.4	7.5	0.4	30.5
Gas wells operations, only.....	16	1	0.1	0.5	(NA)	0.1	0.2	18.3	2.9	17.2	3.9	0.1	7.6
Louisiana, total.....	522	116	18.4	166.3	10.3	21.4	80.5	3,223.0	976.9	3,349.4	850.4	17.1	2,107.2

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
West South Central Division--Con.													
Producing Operations, total.....	487	116	18.3	165.6	10.2	21.3	80.3	3,221.3	959.0	3,349.4	830.9	17.0	2,109.3
With drilling.....	182	79	13.0	114.1	9.2	19.3	74.5	3,132.6	943.7	3,252.8	823.5	15.8	2,052.6
Without drilling.....	163	10	1.1	7.2	0.8	1.7	4.8	82.9	13.6	90.5	6.0	1.1	56.6
Undistributed.....	142	27	4.2	44.3	0.2	0.4	1.0	5.7	1.8	6.1	1.5	-	-
Oil well operations, only.....	126	8	1.1	6.6	0.9	1.8	5.1	41.7	19.7	48.7	12.7	1.1	55.3
With drilling.....	39	4	0.5	3.1	0.4	0.8	2.3	22.6	14.6	25.8	11.4	0.5	35.0
Without drilling.....	87	4	0.6	3.5	0.5	1.0	2.8	19.1	5.1	22.9	1.3	0.7	20.4
Oil and gas well operations.....	171	75	12.7	112.2	8.9	18.6	72.8	3,146.9	918.0	3,261.5	803.4	15.6	2,038.1
With drilling.....	127	70	12.3	109.5	8.7	18.2	71.3	3,097.5	910.7	3,208.1	800.1	15.1	2,004.4
Without drilling.....	44	5	0.4	2.7	0.2	0.4	1.5	49.4	7.3	53.4	3.3	0.4	33.7
Gas well operations, only.....	48	6	0.3	2.4	0.2	0.5	1.4	26.9	19.6	33.1	13.4	0.3	15.9
With drilling.....	16	5	0.2	1.5	0.1	0.3	0.9	12.5	18.4	18.9	12.0	0.2	13.3
Without drilling.....	32	1	0.1	0.9	0.1	0.2	0.5	14.4	1.2	14.2	1.4	0.1	2.5
Nonproducing operations.....	35	-	0.1	0.7	(Z)	0.1	0.3	1.7	17.8	-	19.5	0.1	(⁵)
North Louisiana, total.....	248	39	3.0	22.7	2.0	4.1	13.1	200.8	47.0	212.9	35.0	3.1	208.9
Producing operations, total.....	241	39	3.0	22.6	2.0	4.1	13.1	201.2	(D)	212.9	(D)	3.1	209.6
With drilling.....	69	27	1.8	13.6	1.4	3.1	10.0	157.7	38.4	164.3	31.8	2.4	178.9
Without drilling.....	94	7	0.6	3.8	0.5	0.9	2.7	41.3	7.4	46.2	2.5	0.7	30.7
Undistributed.....	78	5	0.6	5.3	0.1	0.1	0.3	2.2	0.8	2.4	0.6	-	-
Oil well operations, only.....	82	5	0.7	3.9	0.5	1.2	3.4	25.0	8.6	30.1	3.4	0.7	42.9
With drilling.....	26	3	0.4	2.3	0.3	0.7	2.1	14.6	6.5	18.3	2.7	0.4	32.0
Without drilling.....	56	2	0.3	1.6	0.2	0.5	1.3	10.4	2.1	11.8	0.7	0.4	10.9
Oil and gas well operations.....	64	26	1.6	12.1	1.2	2.4	8.6	160.4	34.3	166.6	28.0	15.6	2,038.1
With drilling.....	37	21	1.3	10.3	1.0	2.1	7.4	132.8	29.2	135.6	26.4	15.1	2,004.4
Without drilling.....	27	5	0.3	1.8	0.2	0.3	1.2	27.6	5.1	31.0	1.6	0.4	33.7
Gas wells operations, only.....	17	3	0.2	1.3	0.2	0.3	0.8	13.6	3.0	13.7	2.9	0.3	15.9
With drilling.....	6	3	0.1	0.9	0.1	0.2	0.6	10.3	2.7	10.3	2.7	0.2	13.3
Without drilling.....	11	-	0.1	0.4	(Z)	0.1	0.2	3.3	0.3	3.4	0.2	0.1	2.5
South and Offshore Louisiana, total.....	274	77	15.3	143.6	8.3	17.3	67.4	3,022.1	929.8	3,136.6	815.4	² 14.0	² 1,898.3
Producing operations, total.....	246	77	15.3	143.0	8.3	17.2	67.2	3,020.1	912.5	3,136.6	796.0	13.9	1,899.7
With drilling.....	113	52	11.2	100.6	7.8	16.3	64.4	2,974.9	905.2	3,088.6	791.7	13.5	1,873.8
Without drilling.....	69	3	0.5	3.3	0.3	0.7	2.1	41.5	6.2	44.2	3.5	0.5	25.9
Undistributed.....	64	22	3.6	39.0	0.1	0.2	0.7	3.6	1.0	3.7	0.9	-	-
Oil well operations, only.....	44	3	0.4	2.8	0.2	0.6	1.7	16.7	11.1	18.6	9.4	² 0.4	² 12.5
With drilling.....	13	1	0.1	0.8	(Z)	0.1	0.2	8.0	8.1	7.5	8.7	² 0.1	² 3.0
Without drilling.....	31	2	0.3	2.0	0.2	0.5	1.5	8.7	3.0	11.1	0.7	² 0.3	² 9.5
Oil and gas well operations.....	107	49	11.1	100.0	7.8	16.2	64.2	2,986.5	883.6	3,094.9	775.4	13.4	1,882.5
With drilling.....	90	49	11.0	99.1	7.7	16.1	63.9	2,964.7	881.4	3,072.5	773.7	13.3	1,867.6
Without drilling.....	17	-	0.1	0.9	0.1	0.1	0.3	21.8	2.2	22.4	1.7	0.2	14.9
Gas well operations, only.....	31	3	0.2	1.1	0.1	0.2	0.6	13.3	16.6	19.5	10.5	² 0.1	² 4.7
With drilling.....	10	2	0.1	0.6	(Z)	0.1	0.3	2.2	15.7	8.6	9.3	0.1	3.2
Without drilling.....	21	1	0.1	0.5	0.1	0.1	0.3	11.1	0.9	10.9	1.2	(Z)	1.5
Nonproducing operations.....	28	-	0.1	0.6	(Z)	(Z)	0.2	2.0	17.4	-	19.4	(Z)	(⁵)
Oklahoma.....	918	103	16.1	132.7	7.1	13.5	44.5	758.0	227.9	828.3	157.6	18.6	627.4
Producing operations, total.....	909	103	16.1	132.6	7.1	13.5	44.5	758.2	227.6	828.3	157.4	18.5	628.5
With drilling.....	230	67	9.0	71.0	5.4	10.7	37.5	686.4	211.6	751.3	146.8	15.8	554.4
Without drilling.....	225	10	1.3	7.0	1.0	1.8	4.6	52.9	10.2	58.4	4.7	2.7	74.1
Undistributed.....	454	26	5.8	54.6	0.7	1.0	2.4	18.9	5.8	18.6	6.0	-	-
Oil well operations, only.....	217	18	1.7	7.9	1.3	2.5	5.9	43.2	15.4	50.7	8.0	4.1	102.0
Oil and gas well operations.....	210	59	8.6	69.5	5.0	9.8	35.8	683.3	204.6	746.3	141.6	14.3	497.2
With drilling.....	144	54	8.1	66.6	4.6	9.2	34.3	658.0	200.2	718.4	139.8	13.6	469.7
Without drilling.....	66	5	0.5	2.9	0.4	0.6	1.5	25.3	4.4	27.9	1.8	0.6	27.5
Gas wells operations, only.....	28	-	0.2	0.7	0.1	0.2	0.4	12.8	1.7	12.7	1.9	0.1	29.3

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
West South Central Division--Con.													
Texas, total.....	3,100	365	45.0	386.7	20.2	39.5	134.3	3,863.1	945.2	4,179.3	629.0	54.1	3,267.0
Producing operations, total.....	3,013	360	44.5	382.0	20.0	39.2	133.4	3,872.7	924.2	4,179.3	617.7	53.7	3,275.2
With drilling.....	811	191	21.2	174.4	13.9	28.0	101.7	3,312.8	827.9	3,579.8	560.9	44.2	2,845.2
Without drilling.....	1,184	58	6.1	39.8	4.2	8.2	24.6	503.2	78.9	542.9	39.3	9.5	429.9
Undistributed.....	1,018	111	17.2	167.7	1.9	3.0	7.0	56.7	17.4	56.5	17.6	-	-
Oil well operations only.....	967	44	5.2	30.9	3.7	7.3	19.6	308.4	95.0	344.4	58.9	9.4	408.8
With drilling.....	301	26	2.6	16.9	1.9	3.8	10.5	139.2	67.2	159.6	46.7	4.2	212.6
Without drilling.....	666	18	2.6	14.0	1.8	3.5	9.1	169.2	27.8	184.8	12.2	5.2	196.2
Oil and gas well operations.....	850	195	21.4	178.3	14.0	28.1	104.1	3,444.9	788.4	3,709.4	525.0	43.5	2,752.7
With drilling.....	476	160	18.3	155.4	11.9	23.9	90.1	3,145.6	742.8	3,387.8	501.8	39.6	2,546.2
Without drilling.....	374	35	3.1	22.9	2.1	4.2	14.0	299.3	45.6	321.6	23.2	3.9	206.6
Gas well operations, only.....	178	10	0.8	5.0	0.3	0.9	2.6	62.8	23.6	70.1	16.2	0.8	113.6
With drilling.....	34	5	0.3	2.1	0.1	0.4	1.1	28.0	18.0	33.6	12.4	0.4	86.5
Without drilling.....	144	5	0.5	2.9	0.2	0.5	1.5	34.8	5.5	36.5	3.8	0.4	27.1
Nonproducing operations.....	87	5	0.5	4.7	0.1	0.3	1.0	(⁵)	21.0	-	11.3	0.4	(⁵)
Texas Gulf Coast A and Offshore													
Texas, total.....	392	80	12.2	123.4	3.1	6.4	21.8	653.2	151.8	692.8	112.2	² 14.8	² 548.6
Producing operations, total.....	373	78	12.2	122.3	3.0	6.3	21.2	660.7	138.5	692.8	105.8	14.7	550.1
With drilling.....	95	29	4.3	40.7	2.1	4.5	15.9	565.3	124.8	595.0	95.1	13.7	494.8
Without drilling.....	120	13	1.2	9.5	0.8	1.6	4.4	84.1	11.1	89.8	5.4	1.0	55.3
Undistributed.....	158	36	6.7	72.2	0.3	0.4	1.0	10.7	2.6	8.0	5.3	-	-
Oil well operations, only.....	83	6	0.6	4.7	0.5	0.8	2.6	22.8	7.7	26.5	4.0	0.7	23.5
Oil and gas well operations....	109	34	12.7	44.1	2.2	4.7	17.1	625.3	115.0	653.3	87.1	14.0	521.7
With drilling.....	59	23	3.8	36.2	1.8	3.8	13.8	554.0	107.4	578.3	83.2	13.4	484.2
Without drilling.....	50	11	8.9	7.9	0.4	0.9	3.3	71.3	7.6	75.0	3.9	0.6	37.5
Gas well operations, only.....	23	2	0.1	1.2	0.1	0.2	0.6	1.3	13.2	5.0	9.4	0.1	4.8
Nonproducing operations.....	19	2	0.2	1.1	0.1	0.1	0.6	(⁵)	13.3	-	6.4	(Z)	(⁵)
Texas Gulf Coast, B.....	174	19	1.3	9.7	1.0	2.1	7.3	266.3	45.5	282.3	29.4	² 1.6	² 233.2
Producing operations, total.....	170	19	1.3	9.7	1.0	2.1	7.3	266.2	45.4	282.2	29.4	1.6	234.1
With drilling.....	60	13	0.8	6.3	0.6	1.3	5.2	203.6	38.2	215.7	26.0	1.3	205.9
Without drilling.....	95	5	0.4	2.9	0.3	0.7	2.1	62.4	7.2	66.2	3.4	0.3	28.2
Undistributed.....	15	1	0.1	0.5	(Z)	(Z)	0.1	0.2	0.1	0.3	(Z)	-	-
Oil well operations, only.....	22	-	(Z)	0.2	(Z)	0.1	0.2	3.8	1.2	3.6	1.4	0.1	1.3
Without drilling.....	18	-	(Z)	0.2	(Z)	0.1	0.2	3.3	(D)	3.1	(D)	(Z)	1.3
Oil and gas well operations....	106	17	1.1	8.5	0.9	1.9	6.9	256.9	42.7	272.3	27.2	1.5	225.2
With drilling.....	49	13	0.8	6.2	0.6	1.3	5.1	200.8	36.6	212.5	24.8	1.2	202.7
Without drilling.....	57	4	0.3	2.3	0.3	0.6	1.8	56.1	6.1	59.8	2.4	0.2	22.4
Gas well operations, only.....	27	1	0.1	0.5	(Z)	(Z)	0.2	4.2	1.2	4.8	0.6	0.1	7.7
With drilling.....	7	-	(Z)	0.1	(Z)	(Z)	0.1	1.2	(D)	1.5	(D)	0.1	3.2
Without drilling.....	20	1	0.1	0.4	-	-	0.1	3.0	(D)	3.3	(D)	(Z)	4.5
South Texas, total.....	226	33	3.4	29.1	1.8	3.6	12.9	498.5	101.3	511.3	88.5	² 3.9	² 342.7
Producing operations, total.....	219	33	3.4	29.2	1.8	3.6	12.9	498.8	(D)	511.3	(D)	3.9	343.4
With drilling.....	66	19	1.9	15.5	1.3	2.7	10.5	458.2	94.3	468.7	83.9	3.3	304.5
Without drilling.....	88	4	0.4	2.8	0.3	0.6	1.8	36.3	4.5	38.1	2.8	0.6	38.8
Undistributed.....	65	10	1.1	10.9	0.2	0.3	0.7	4.2	(D)	4.6	(D)	-	-
Oil well operations.....	35	-	0.1	0.6	0.1	0.2	0.5	5.1	1.7	6.0	0.8	0.2	5.9
With drilling.....	11	-	(Z)	0.2	(Z)	0.1	0.2	2.0	1.0	2.5	0.5	0.1	1.0
Without drilling.....	24	-	0.1	0.4	0.1	0.1	0.3	3.1	0.7	3.5	0.3	0.2	4.9
Oil and gas well operations....	94	22	2.1	17.2	1.5	3.0	11.6	487.3	96.1	498.1	85.3	3.6	330.6
With drilling.....	51	19	1.8	15.2	1.3	2.6	10.3	456.1	92.7	465.8	83.0	3.2	299.4
Without drilling.....	43	3	0.3	2.0	0.2	0.4	1.3	31.2	3.4	32.3	2.3	0.4	31.2
Gas well operations.....	25	1	(Z)	0.6	(Z)	0.1	0.2	2.3	1.0	2.7	0.6	0.1	0.8
Without drilling.....	21	1	-	0.5	-	0.1	0.2	2.1	0.4	2.3	0.2	(Z)	0.2

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
West South Central Division--Con.													
Southwest Texas, total.....	188	12	1.1	7.6	0.7	1.3	4.4	64.5	18.8	68.5	14.8	1.3	64.2
Producing operations, total.....	180	12	1.0	7.2	0.7	1.3	4.3	64.6	18.6	68.5	14.7	1.2	64.5
With drilling.....	45	7	0.6	4.3	0.5	1.0	3.4	47.8	14.8	49.9	12.7	0.8	43.5
Without drilling.....	70	1	0.2	1.0	0.1	0.2	0.6	13.3	2.7	15.1	1.0	0.5	21.1
Undistributed.....	65	4	0.2	1.9	0.1	0.1	0.3	3.4	1.1	3.6	1.0	-	-
Oil well operations, only.....	62	3	0.4	2.4	0.3	0.5	1.6	15.2	5.6	14.3	6.6	0.6	23.4
With drilling.....	20	2	0.3	1.8	0.2	0.4	1.3	12.5	4.9	11.1	6.3	0.2	10.6
Without drilling.....	42	1	0.1	0.6	0.1	0.1	0.3	2.7	0.7	3.2	0.3	0.4	12.8
Oil and gas well operations....	34	5	0.4	2.7	0.3	0.6	2.4	44.6	(D)	49.3	(D)	0.6	39.9
Gas well operations.....	13	-	(Z)	0.2	(Z)	(Z)	(Z)	1.4	(D)	1.4	(D)	(Z)	1.2
North Central Texas A.....	412	36	2.9	18.1	2.3	4.5	12.7	154.1	54.4	182.3	26.2	3.9	20.6
Producing operations, total.....	411	36	2.9	18.1	2.3	4.5	12.7	154.1	54.4	182.3	26.2	3.9	20.5
With drilling.....	130	27	2.0	12.3	1.5	3.0	8.2	117.2	44.4	139.3	22.3	2.7	15.3
Without drilling.....	127	7	0.7	4.4	0.6	1.2	3.7	31.8	8.1	37.4	2.5	1.2	5.1
Undistributed.....	154	2	0.3	1.3	0.2	0.3	0.8	5.1	1.9	5.6	1.4	-	-
Oil well operations, total.....	168	12	1.1	5.5	0.9	1.8	4.1	40.6	18.3	49.9	9.1	2.1	87.1
With drilling.....	81	8	0.8	3.8	0.6	1.2	2.7	27.9	(D)	34.7	(D)	1.2	60.7
Without drilling.....	87	4	0.3	1.7	0.3	0.6	1.4	12.7	(D)	15.2	(D)	0.9	26.4
Oil and gas well operations....	77	22	1.5	11.1	1.2	2.4	7.8	107.5	34.0	126.1	15.5	1.8	91.2
With drilling.....	47	19	1.2	8.5	0.9	1.8	5.5	88.8	29.4	104.3	14.0	1.5	80.2
Without drilling.....	30	3	0.3	2.6	0.3	0.6	2.3	18.7	4.6	21.8	1.5	0.3	11.0
North Central Texas B.....	272	15	1.5	9.8	1.1	2.2	6.7	90.9	26.7	103.9	13.7	2.4	120.3
Producing operations, total.....	269	15	1.5	9.8	1.1	2.2	6.7	90.9	(D)	103.9	(D)	2.4	120.9
With drilling.....	71	11	0.8	6.0	0.6	1.3	4.5	54.5	20.2	64.4	10.4	1.6	95.8
Without drilling.....	134	1	0.5	2.5	0.3	0.6	1.6	32.7	5.1	35.5	2.3	0.8	25.0
Undistributed.....	64	3	0.2	1.2	0.1	0.2	0.6	3.7	(D)	4.0	(D)	-	-
Oil well operations, only.....	128	4	0.6	3.4	0.4	0.8	2.5	40.0	11.1	46.0	5.2	1.1	43.1
Oil and gas well operations....	60	8	0.6	4.8	0.5	1.1	3.4	42.2	13.6	48.8	7.1	1.2	77.2
With drilling.....	36	8	0.5	4.1	0.4	0.9	3.0	35.5	11.8	41.1	6.3	1.1	68.8
Without drilling.....	24	-	0.1	0.7	0.1	0.2	0.4	6.7	1.8	7.7	0.8	0.2	8.4
East Texas A, total.....	276	31	5.5	51.1	0.8	1.2	2.9	85.8	19.5	89.7	15.6	5.5	92.0
Producing operations, total.....	258	29	5.2	48.5	0.8	1.2	2.9	86.0	17.8	89.7	14.1	5.4	92.4
With drilling.....	28	2	0.1	0.9	0.1	0.2	0.6	31.2	9.5	31.7	9.0	4.8	55.4
Without drilling.....	49	3	0.5	2.1	0.3	0.4	1.2	46.0	5.0	48.4	2.6	0.7	37.0
Undistributed.....	181	24	4.6	45.5	0.4	0.6	1.2	8.8	3.3	9.6	2.5	-	-
Oil well operations, only.....	42	3	0.6	1.9	0.2	0.4	0.9	24.6	3.5	24.5	3.6	0.5	28.0
Oil and gas well operations....	25	2	0.2	1.0	0.2	0.2	0.7	51.5	10.6	54.4	7.7	4.7	63.0
Gas well operations, only.....	10	-	(Z)	0.1	(Z)	(Z)	0.1	1.2	(D)	1.1	(D)	(Z)	1.5
Nonproducing operations.....	18	2	0.3	2.6	(Z)	(Z)	(Z)	(⁵)	1.7	-	1.5	0.1	(⁵)
East Texas B.....	355	35	3.0	21.0	2.0	4.0	12.9	356.2	55.7	380.5	31.4	4.1	295.2
Producing operations, total.....	346	35	3.0	20.8	2.0	4.0	12.8	356.9	(D)	380.5	(D)	4.1	295.6
With drilling.....	70	20	1.7	13.2	1.2	2.5	9.0	298.4	44.4	318.3	24.5	2.9	243.6
Without drilling.....	160	9	0.8	4.7	0.6	1.2	3.2	51.8	8.5	55.2	5.1	1.2	52.0
Undistributed.....	116	6	0.5	3.0	0.2	0.3	0.6	6.6	(D)	7.0	(D)	-	-
Oil well operations, only.....	125	4	0.6	3.4	0.4	0.8	2.1	29.8	7.2	32.6	4.4	1.0	38.7
With drilling.....	21	2	0.2	1.2	0.1	0.2	0.7	10.7	2.5	11.6	1.6	0.2	13.2
Without drilling.....	104	2	0.4	2.2	0.3	0.6	1.4	19.1	4.7	21.0	2.8	0.8	25.5

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
West South Central Division--Con.													
Oil and gas well operations.....	88	24	1.8	14.1	1.4	2.8	9.8	316.9	45.3	337.3	25.0	3.0	234.0
With drilling.....	49	18	1.5	12.0	1.1	2.3	8.3	287.6	41.9	306.7	22.9	2.7	214.1
Without drilling.....	39	6	0.3	2.1	0.3	0.5	1.5	29.3	3.4	30.6	2.1	0.4	19.9
Gas well operations, only.....	17	1	0.1	0.4	(Z)	0.1	0.3	3.4	0.5	3.7	0.2	0.1	22.9
West Texas A.....	461	63	10.9	93.7	5.2	10.2	38.4	1,320.8	349.8	1,460.8	209.8	12.6	1,088.9
Producing operations, total.....	450	63	10.9	93.6	5.2	10.2	38.4	1,321.9	347.3	1,460.8	208.4	12.5	1,091.0
With drilling.....	132	38	6.9	59.3	4.4	8.5	33.9	1,224.4	331.6	1,357.2	198.8	10.0	996.8
Without drilling.....	184	6	0.8	5.4	0.5	1.0	2.9	85.4	12.0	91.6	5.8	2.4	94.2
Undistributed.....	134	19	3.3	28.9	0.3	0.6	1.5	12.0	3.8	12.0	3.8	-	-
Oil well operations, only.....	184	10	0.9	6.6	0.5	1.2	3.7	94.5	(D)	103.9	(D)	2.7	132.3
With drilling.....	50	5	0.4	3.0	0.2	0.5	1.7	32.0	13.6	36.4	9.2	1.4	64.1
Without drilling.....	134	5	0.5	3.6	0.3	0.7	2.0	62.5	(D)	67.5	(D)	1.3	68.2
Oil and gas well operations....	122	34	6.7	58.0	4.3	8.3	33.2	1,213.7	320.3	1,343.0	190.9	9.8	939.8
With drilling.....	81	33	6.5	56.3	4.1	8.0	32.3	1,192.2	316.7	1,319.7	189.1	8.6	915.8
Without drilling.....	41	1	0.2	1.7	0.2	0.3	0.9	21.5	3.6	23.3	1.8	1.1	24.0
Gas well operations, only.....	10	-	(Z)	0.1	(Z)	(Z)	(Z)	1.6	(D)	1.9	(D)	(Z)	18.9
West Texas B.....	157	12	0.8	5.9	0.6	1.2	4.3	165.7	67.0	185.0	47.8	0.9	105.1
Producing operations.....	153	12	0.8	5.9	0.6	1.2	4.3	165.7	67.0	185.0	47.7	0.9	105.8
With drilling.....	71	9	0.6	4.3	0.5	0.1	3.5	146.4	60.9	164.5	42.8	0.6	88.4
Without drilling.....	70	3	0.2	1.5	0.1	0.2	0.7	18.9	6.0	20.0	4.8	0.3	17.3
Oil well operations, only.....	72	2	0.2	1.3	0.2	0.3	0.9	25.7	(D)	30.1	(D)	0.3	17.2
With drilling.....	31	1	0.1	0.8	0.1	0.2	0.5	17.0	14.1	20.7	10.4	0.1	10.0
Without drilling.....	41	1	0.1	0.5	0.1	0.1	0.4	8.7	(D)	9.4	(D)	0.2	7.1
Oil and gas well operations....	62	9	0.6	4.2	0.5	0.9	3.4	138.5	50.8	153.1	36.2	0.6	87.3
With drilling.....	38	8	0.5	3.5	0.4	0.8	3.0	129.3	46.7	143.6	32.4	0.5	77.9
Without drilling.....	24	1	0.1	0.7	0.1	0.1	0.4	9.2	4.1	9.5	3.8	0.1	9.5
Gas well operations, only.....	7	1	0.1	0.3	(Z)	(Z)	(Z)	1.1	(D)	1.3	(D)	(Z)	1.3
Texas Panhandle.....	181	29	2.3	17.1	1.5	2.8	9.8	207.2	54.7	222.2	39.7	3.0	199.0
Producing operations, total.....	184	28	2.3	16.9	1.5	2.8	9.7	207.4	(D)	222.2	(D)	3.0	199.2
With drilling.....	43	16	1.5	11.5	1.0	2.0	7.1	165.6	44.9	175.1	35.4	2.5	175.6
Without drilling.....	87	6	0.5	3.2	0.4	0.7	2.4	40.4	8.7	45.6	3.5	0.5	23.6
Undistributed.....	54	6	0.3	2.2	0.1	0.1	0.2	1.4	(D)	1.5	(D)	-	-
Oil well operations, only.....	40	-	0.1	0.9	0.1	0.3	0.6	6.0	1.8	7.0	0.9	0.2	8.3
Oil and gas well operations....	73	18	1.7	12.4	1.2	2.2	8.1	159.5	48.5	171.6	36.5	2.6	143.3
With drilling.....	35	13	1.4	10.4	1.0	1.8	6.6	137.7	41.8	145.8	33.7	2.3	131.5
Without drilling.....	33	5	0.3	2.0	0.2	0.4	1.5	21.8	6.7	25.8	2.8	0.3	11.7
Gas well operations, only.....	17	4	0.2	1.4	0.2	0.2	0.8	40.5	3.2	42.1	1.5	0.2	47.6
Mountain Division, total.....	769	99	9.0	76.1	4.7	9.3	33.2	1,051.6	318.1	1,134.0	235.7	11.5	969.3
Producing operations, total.....	704	96	8.8	75.1	4.7	9.2	32.9	1,055.7	311.5	1,134.0	233.2	11.3	973.7
With drilling.....	251	67	6.0	49.4	3.7	7.3	27.4	966.7	288.9	1,035.5	220.2	9.8	911.5
Without drilling.....	264	13	1.2	9.4	0.6	1.2	4.3	79.0	18.9	87.3	10.6	1.4	62.2
Undistributed.....	189	16	1.7	16.2	0.4	0.6	1.1	9.9	3.7	11.2	2.4	-	-
Oil well operations, only.....	246	16	1.2	8.8	0.7	1.3	4.7	164.0	69.1	181.9	51.1	2.4	166.9
With drilling.....	99	10	0.7	4.9	0.4	0.8	3.1	134.0	60.9	146.8	48.1	1.6	134.2
Without drilling.....	147	6	0.5	3.9	0.3	0.5	1.6	30.0	8.2	35.1	3.0	0.8	32.7

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
Mountain Division--Con.													
Oil and gas well operarions.....	201	60	5.7	48.2	3.5	6.9	25.9	863.8	231.0	921.5	173.2	8.5	783.9
With drilling.....	139	54	5.2	43.6	3.2	6.3	23.8	827.4	223.3	881.6	169.0	8.0	760.5
Without drilling.....	62	6	0.5	4.5	0.3	0.6	2.1	36.4	7.7	39.9	4.2	0.5	23.5
Gas well operations, only.....	68	4	0.3	1.8	0.1	0.3	1.2	18.0	7.7	19.4	6.4	0.3	22.8
With drilling.....	13	3	0.1	0.9	0.1	0.2	0.6	5.4	4.7	7.1	3.0	0.2	16.8
Without drilling.....	55	1	0.2	0.9	(Z)	0.1	0.6	12.6	3.0	12.3	3.4	0.1	6.0
Nonproducing operations.....	65	3	0.1	1.1	0.1	0.1	0.3	(⁵)	6.5	-	2.5	0.2	(⁵)
Montana.....	107	8	0.6	4.5	0.4	0.8	2.7	75.0	28.5	80.8	22.7	1.1	59.0
Producing operations.....	94	8	0.6	4.3	0.4	0.8	2.7	75.8	27.4	80.8	22.3	1.1	60.8
With drilling.....	29	7	0.4	3.4	0.3	0.5	2.2	69.0	25.2	73.1	21.1	0.9	56.4
Without drilling.....	26	1	0.1	0.7	0.1	0.2	0.4	6.0	1.9	6.9	1.0	0.2	4.4
Oil and gas well operations.....	13	4	0.2	2.3	0.2	0.3	1.3	47.9	9.4	48.9	8.5	0.5	26.7
With drilling.....	6	4	0.2	2.1	0.2	0.3	1.2	45.5	8.7	46.0	8.3	0.4	23.8
Without drilling.....	7	0	(Z)	0.2	(Z)	(Z)	0.1	2.4	0.7	2.9	0.2	0.1	3.0
Wyoming, total.....	149	25	2.1	18.2	1.2	2.4	9.5	359.5	102.2	399.7	61.9	2.9	334.3
Producing operations, total.....	136	24	2.1	18.0	1.2	2.4	9.3	359.9	101.2	399.7	61.3	2.9	335.4
With drilling.....	64	20	1.7	14.6	1.1	2.2	8.5	348.7	98.9	387.3	60.4	2.7	324.0
Without drilling.....	43	2	0.2	1.2	0.1	0.2	0.7	10.5	2.0	11.7	0.8	0.2	11.5
Undistributed.....	29	2	0.2	2.2	(Z)	0.1	0.1	0.6	0.2	0.7	0.2	-	-
Oil well operations, only.....	27	3	0.1	1.0	0.1	0.2	0.5	44.6	22.0	52.5	14.1	0.3	21.2
Oil and gas well operations.....	40	17	1.6	13.6	1.0	2.1	8.1	303.3	77.0	332.8	45.4	(NA)	(NA)
Colorado, total.....	165	28	2.8	26.9	0.7	1.4	5.7	94.3	35.6	104.5	25.5	2.7	109.9
Producing operations, total.....	152	27	2.5	26.4	0.7	1.4	5.5	94.7	35.0	104.5	25.2	2.6	110.4
With drilling.....	44	10	1.4	10.5	0.4	0.8	3.7	81.6	30.6	89.7	22.5	2.2	102.3
Without drilling.....	53	7	0.5	4.8	0.2	0.4	1.5	10.2	3.5	11.7	2.1	0.5	8.1
Undistributed.....	55	10	1.0	11.1	0.1	0.1	0.3	2.8	0.9	3.1	0.6	-	-
Oil well operations, only.....	46	3	0.3	2.5	0.2	0.3	1.0	9.5	4.7	11.9	2.4	0.7	18.8
Oil and gas well operations.....	36	13	1.2	12.3	0.4	0.9	3.9	79.0	27.9	86.1	20.8	1.9	86.9
With drilling.....	23	9	0.9	9.3	0.3	0.7	3.0	74.3	26.6	80.7	20.2	1.7	84.7
Without drilling.....	13	4	0.3	3.0	0.1	0.2	0.9	4.7	1.3	5.4	0.6	0.2	2.2
Gas well operations, only.....	15	1	0.1	0.5	(Z)	0.1	0.3	3.2	1.5	3.4	1.4	0.1	4.7
Nonproducing operations.....	13	1	0.1	0.5	(Z)	(Z)	0.2	(⁵)	0.6	-	0.2	0.1	(⁵)
New Mexico, total.....	264	31	3.3	23.7	2.1	4.1	13.4	447.3	124.0	470.3	101.0	4.2	376.3
Producing operations, total.....	261	31	3.3	23.7	2.1	4.1	13.4	447.6	123.6	470.3	100.8	4.2	377.1
With drilling.....	92	24	2.5	18.6	1.7	3.3	11.4	391.4	110.5	408.8	93.0	3.6	343.8
Without drilling.....	123	3	0.4	2.5	0.2	0.5	1.5	51.0	11.0	55.4	6.6	0.5	33.3
Undistributed.....	46	4	0.4	2.6	0.2	0.3	0.5	5.1	2.1	6.0	1.2	-	-
Oil well operations, only.....	81	4	0.4	2.2	0.2	0.3	1.1	35.4	12.4	38.5	9.3	0.7	51.1
Oil and gas well operations.....	98	23	2.4	18.4	1.6	3.3	11.5	395.6	105.8	414.8	86.7	3.4	310.5
With drilling.....	62	22	2.3	17.4	1.5	3.1	10.7	368.0	100.4	385.0	83.4	3.1	297.2
Without drilling.....	36	1	0.1	1.0	0.1	0.2	0.8	27.6	5.4	29.8	3.3	0.2	13.3
Gas well operations, only.....	36	-	0.1	0.5	(Z)	0.2	0.3	11.4	3.2	11.0	3.6	0.1	0.4
West New Mexico.....	68	7	1.2	8.1	0.7	1.5	4.8	92.0	24.3	91.2	25.2	1.5	73.8
Oil and gas well operations.....	22	6	1.1	7.3	0.7	1.4	4.4	83.5	21.4	81.8	23.0	1.2	46.6
With drilling.....	13	6	1.1	7.1	0.7	1.3	4.2	77.8	20.3	75.3	22.7	1.2	46.0
Without drilling.....	9	-	(Z)	0.2	(Z)	0.1	0.2	5.7	1.1	6.5	0.3	(Z)	0.7

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Type of Operation--Con.													
Mountain Division--Con.													
East New Mexico.....	196	24	2.1	15.5	1.3	2.6	8.6	355.2	99.7	379.2	75.8	2.7	302.5
Oil and gas well operations....	76	17	1.4	11.1	1.0	2.0	7.2	312.2	84.4	333.0	63.6	2.1	15.7
With drilling.....	49	16	1.3	10.3	0.9	1.8	6.6	290.3	80.1	309.7	60.7	1.9	14.5
Without drilling.....	27	1	0.1	0.8	0.1	0.2	0.6	21.9	4.3	23.3	2.9	0.2	1.2
Pacific Division	475	98	14.6	132.2	7.6	15.3	59.4	1,058.3	499.6	1,094.6	463.3	13.5	914.0
Producing operations, total.....	421	95	14.3	128.7	7.5	15.1	58.5	1,065.8	439.6	1,094.6	410.7	13.3	918.5
With drilling.....	118	60	9.7	85.0	6.3	12.9	51.2	1,016.5	426.8	1,038.6	404.6	12.0	887.7
Without drilling.....	124	11	1.0	8.4	0.7	1.3	5.0	39.0	9.8	44.8	4.0	1.3	30.8
Undistributed.....	179	24	3.6	35.2	0.6	0.9	2.3	10.4	3.0	11.2	2.1	-	-
Oil well operations, only.....	164	41	4.1	35.7	2.8	5.9	22.0	453.3	183.8	482.6	154.5	3.4	228.1
With drilling.....	60	32	3.3	29.2	2.3	4.9	18.1	424.3	175.4	448.3	151.4	2.4	203.9
Without drilling.....	104	9	0.8	6.5	0.5	1.0	3.9	29.0	8.4	34.3	3.1	1.0	24.2
Oil and gas well operations.....	53	25	5.9	52.1	3.8	7.6	31.4	528.6	238.2	516.6	240.2	9.8	683.3
Gas well operations, only.....	25	5	0.7	5.6	0.4	0.7	2.9	83.5	14.6	84.2	13.9	0.1	7.1
Nonproducing operations.....	54	3	0.3	3.5	0.1	0.2	0.9	(⁵)	60.1	-	52.5	0.3	(⁵)

Note: Detailed figures may not add to totals because of independent rounding.

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (X) Less than one half the unit of measure specified.

¹Includes data for central offices or related facilities in New Jersey.

²Data for offshore operations were collected with adjacent onshore reports for 1963.

³See table 2B. for comparisons of comparable 1967 and 1963 figures.

⁴Offshore Alaska is defined to include Cook Inlet.

⁵Not shown since the cost of supplies used, etc. and purchased machinery installed exceeds the value of shipments and receipts plus capital expenditures.

Table 2B. General Statistics for the Industry, by County: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS													
Pennsylvania:													
Armstrong.....	28	3	0.2	1.0	0.1	0.4	0.4	3.0	0.6	3.1	0.5	0.1	3.8
Warren.....	29	1	0.1	0.6	0.1	0.1	0.4	2.1	0.9	2.5	0.5	0.1	1.1
Illinois:													
Clay.....	47	1	0.1	0.7	0.1	0.2	0.5	8.0	2.4	9.4	1.1	0.2	6.1
Crawford.....	17	2	0.3	2.4	0.3	0.6	1.9	7.1	2.1	8.2	1.1	0.4	10.2
Fayette.....	26	1	0.2	1.5	0.2	0.4	1.2	20.2	4.0	23.1	1.0	0.2	41.3
Hamilton.....	42	1	0.1	0.7	0.1	0.2	0.5	12.8	4.2	14.1	2.9	0.2	9.1
Lawrence.....	35	3	0.4	2.6	0.3	0.6	1.9	16.0	3.7	18.2	1.5	0.4	18.5
Marion.....	32	1	0.3	1.8	0.2	0.4	1.3	11.5	(D)	14.3	(D)	0.3	25.1
Richland.....	41	2	0.2	1.1	0.1	0.2	0.7	3.2	2.0	4.1	1.1	0.1	2.2
Wayne.....	57	2	0.3	1.5	0.2	0.4	1.1	12.6	5.1	14.9	2.8	0.3	9.2
White.....	81	4	0.4	2.4	0.3	0.6	1.8	13.5	4.1	15.1	2.5	0.5	14.7
Kansas:													
Butler.....	63	2	0.3	2.0	0.2	0.5	1.3	9.8	3.0	11.5	1.2	0.5	14.2
Cowley.....	51	-	0.1	0.7	0.1	0.2	0.5	5.7	1.6	6.5	0.7	0.2	7.1
Ellis.....	92	-	0.2	1.1	0.2	0.3	0.7	16.8	6.0	20.4	2.3	0.3	18.8
Rooks.....	72	2	0.2	1.4	0.2	0.3	1.0	8.9	3.2	10.9	1.3	0.2	11.4
Rush.....	22	1	0.1	0.8	0.1	0.2	0.6	5.1	1.1	4.7	1.5	0.2	0.9
Russell.....	87	3	0.4	2.3	0.3	0.5	1.5	17.9	5.2	20.6	2.6	0.4	18.0
Sedgwick.....	123	10	0.9	5.6	0.4	0.8	2.1	9.3	3.3	10.8	1.8	0.7	12.6
Seward.....	36	2	0.2	1.5	0.1	0.2	0.9	6.6	1.2	7.1	0.8	0.2	5.7
West Virginia:													
Harrison.....	28	2	0.1	0.7	0.1	0.2	0.5	3.1	0.8	3.6	0.3	0.2	1.8
Kanawha.....	80	4	0.4	2.2	0.2	0.5	1.3	8.7	1.4	7.2	3.0	0.3	5.8
Lewis.....	21	2	0.1	0.7	0.1	0.2	0.5	2.2	1.8	2.9	1.1	0.1	2.6
Ritchie.....	58	2	0.1	0.6	0.1	0.2	0.5	1.6	0.7	1.6	0.6	0.2	1.7
Roane.....	110	1	0.2	1.1	0.2	0.3	0.8	2.9	2.3	3.6	1.6	0.2	2.1
Kentucky:													
Daviess.....	47	2	0.2	0.9	0.1	0.2	0.6	2.0	0.9	2.3	0.6	0.2	5.3
Floyd.....	21	2	0.2	1.0	0.1	0.2	0.8	3.3	0.8	3.8	0.3	(NA)	(NA)
Pike.....	10	2	0.2	1.2	0.2	0.3	0.9	8.1	1.6	7.5	2.2	0.2	4.6
Mississippi:													
Adams.....	33	4	0.2	1.6	0.1	0.4	1.0	14.5	5.8	17.3	3.0	0.2	16.4
Arkansas:													
Columbia.....	20	3	0.1	1.1	0.1	0.2	0.6	15.9	0.9	16.4	0.3	0.3	10.6
Ouachita.....	24	2	0.1	0.8	0.1	0.2	0.5	5.1	1.5	6.2	0.4	0.2	7.2
Union.....	74	4	0.3	1.8	0.2	0.4	1.2	7.2	2.9	8.5	1.5	0.4	11.2
Louisiana:													
Acadia.....	51	1	0.2	1.3	0.1	0.3	1.0	56.1	15.0	63.1	7.9	0.2	48.9
Bossier.....	38	-	0.1	0.8	0.1	0.2	0.6	19.0	2.8	20.3	1.5	0.1	23.2
Caddo.....	145	18	1.5	12.0	0.7	1.5	4.9	14.6	8.2	19.7	3.1	1.4	40.7
Calcasieu.....	41	6	0.5	3.6	0.3	0.6	2.4	31.7	6.4	30.3	7.8	0.4	18.7
Cameron.....	46	3	0.2	1.9	0.2	0.4	1.2	127.6	30.2	133.3	24.5	0.3	93.1
Claiborne.....	38	3	0.1	1.1	0.1	0.2	0.7	14.4	3.6	16.3	1.6	0.2	17.5
Concordia.....	37	3	0.2	1.3	0.2	0.3	1.1	20.9	4.4	22.6	2.6	0.1	9.9
De Soto.....	28	3	0.1	0.8	0.1	0.2	0.4	7.8	0.9	7.7	1.0	0.1	8.2
Iberia.....	24	3	0.4	3.0	0.3	0.5	2.1	66.9	14.5	69.9	11.4	0.3	52.0
Iberville.....	24	3	0.2	1.3	0.1	0.2	0.7	36.4	7.5	37.7	6.2	0.1	25.3
Jefferson.....	24	7	1.0	9.0	0.5	0.9	3.8	60.9	14.8	67.8	7.9	1.1	41.2
Lafourche.....	43	6	0.6	5.5	0.4	0.7	3.0	181.6	45.1	194.8	31.9	0.7	139.4
La Salle.....	20	3	0.3	1.9	0.2	0.5	1.6	12.3	3.3	13.3	2.3	0.3	13.7
Orleans.....	56	24	4.3	45.8	0.5	0.9	3.8	3.2	0.9	-	4.1	(NA)	(NA)
Plaquemines.....	39	10	1.4	11.6	0.9	1.9	7.3	421.2	86.7	444.6	63.3	1.5	218.8
St. Landry.....	28	2	0.1	1.2	0.1	0.2	0.8	22.3	5.3	24.9	2.6	0.1	21.2
St. Martin.....	41	4	0.2	1.6	0.1	0.3	1.1	71.0	18.8	77.1	12.7	0.2	56.9
St. Mary.....	25	7	0.5	4.7	0.4	0.8	3.0	200.2	45.8	217.4	28.6	0.8	109.5
Terrebonne.....	45	11	1.6	14.0	1.2	2.5	9.8	350.6	70.0	368.6	52.0	1.3	230.7
Union.....	18	3	0.1	0.9	0.1	0.2	0.6	6.6	1.0	6.9	0.7	0.1	9.3
Vermillion.....	48	3	0.2	2.1	0.1	0.3	1.1	99.6	17.8	100.1	17.3	0.4	69.1
Offshore.....	32	12	2.0	18.4	1.7	3.7	14.8	1,110.4	501.9	1,129.7	482.6	1.2	592.6

See footnotes at end of table.

Table 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Texas--Continued													
Pecos.....	91	2	0.2	1.6	0.1	0.3	0.8	76.4	(D)	69.6	(D)	0.5	50.7
Reagan.....	60	1	0.1	0.9	0.1	0.2	0.7	29.3	18.8	31.3	16.9	0.1	12.9
Reeves.....	39	2	0.1	1.2	0.1	0.2	0.7	21.7	(D)	11.7	(D)	0.1	10.2
Refugio.....	57	5	0.4	3.1	0.3	0.6	2.3	80.4	8.7	84.2	4.9	0.4	67.0
Rusk.....	89	7	0.5	3.2	0.3	0.7	2.2	51.3	7.9	55.6	3.6	0.6	49.7
San Patricio.....	71	3	0.2	1.8	0.2	0.3	1.1	32.8	8.2	35.7	4.3	0.3	33.0
Scurry.....	58	4	0.3	2.2	0.2	0.3	1.3	127.2	14.8	138.9	3.0	0.4	74.7
Shackelford.....	48	2	0.1	0.7	0.1	0.2	0.6	3.9	3.2	5.5	1.6	0.2	9.0
Smith.....	74	9	0.6	4.8	0.3	0.6	2.2	11.8	1.7	12.2	1.3	1.1	12.0
Starr.....	36	2	0.2	1.1	0.1	0.3	1.0	27.8	5.9	29.1	4.7	0.2	20.8
Taylor.....	95	5	0.5	3.2	0.3	0.6	1.9	8.7	3.6	10.0	2.3	0.7	19.5
Terry.....	25	1	0.2	2.1	0.1	0.3	1.1	10.7	2.7	12.8	0.6	0.2	11.7
Upton.....	64	3	0.2	1.5	0.1	0.3	1.0	56.2	17.0	65.8	7.4	0.2	29.7
Victoria.....	52	2	0.2	1.8	0.2	0.4	1.4	18.7	4.9	21.3	2.3	0.3	23.3
Ward.....	65	6	0.6	4.7	0.4	0.7	2.6	58.9	15.2	55.6	18.5	0.5	63.6
Wichita.....	179	11	1.0	6.5	0.8	1.5	4.5	27.0	9.6	31.5	5.1	1.3	42.1
Wilbarger.....	42	2	0.1	0.9	0.1	0.2	0.6	8.8	4.9	10.7	3.0	0.2	12.3
Winkler.....	73	4	0.4	3.0	0.3	0.6	2.1	66.8	16.8	74.3	9.3	0.6	58.3
Wood.....	51	1	0.1	0.8	0.1	0.2	0.5	51.3	8.3	56.3	3.2	0.2	39.0
Yoakum.....	57	3	0.2	1.6	0.1	0.2	0.7	82.4	19.6	91.3	10.7	0.2	48.2
Young.....	94	3	0.2	1.1	0.2	0.3	0.8	4.8	2.0	5.8	1.1	0.5	12.1
Montana:													
Glacier.....	20	4	0.1	1.1	0.1	0.2	0.8	7.5	3.9	8.3	3.1	0.2	4.2
Wyoming:													
Fremont.....	23	-	(Z)	0.3	(Z)	(Z)	0.1	35.6	(D)	34.6	(D)	0.1	34.7
Hot Springs.....	15	2	0.1	1.1	0.1	0.1	0.5	28.9	4.5	32.2	1.3	0.2	37.0
Natrona.....	49	13	0.9	8.3	0.3	0.6	2.4	68.8	17.6	79.5	6.9	0.3	32.4
Park.....	28	3	0.2	1.8	0.1	0.3	1.2	79.5	(D)	91.3	(D)	0.2	81.0
Sublette.....	15	2	0.1	1.0	0.1	0.1	0.6	16.5	(D)	17.3	(D)	0.1	23.5
Sweetwater.....	25	3	0.1	1.0	0.1	0.2	0.7	26.5	(D)	27.4	(D)	0.2	26.4
Weston.....	36	1	0.1	0.6	0.1	0.2	0.4	4.5	2.5	5.8	1.1	0.1	5.6
Colorado:													
Denver.....	69	18	1.8	20.0	0.2	0.4	1.6	3.0	3.0	3.4	2.6	(NA)	(NA)
Eddy.....	93	4	0.3	1.9	0.2	0.4	1.1	60.4	16.6	62.1	14.9	0.5	42.8
Lea.....	137	17	1.4	10.9	1.0	1.9	6.4	255.9	70.2	280.3	45.8	1.5	225.0
Rio Arriba.....	32	1	0.4	2.8	0.3	0.6	1.8	24.7	(D)	23.3	(D)	0.4	15.4
San Juan.....	48	4	0.7	4.8	0.4	0.9	2.9	65.3	16.6	66.1	15.8	0.8	54.7
Utah:													
San Juan.....	20	4	0.2	1.2	0.1	0.2	0.9	39.7	7.6	43.9	3.4	0.1	67.0
Uintah.....	22	1	0.1	1.0	0.1	0.2	0.6	17.5	9.8	22.7	4.6	0.1	17.9
California:													
Fresno.....	23	4	0.4	3.3	0.3	0.5	2.3	50.7	10.9	57.7	4.0	0.5	62.8
Kern.....	111	22	4.7	39.0	2.7	5.5	20.4	288.2	86.2	301.7	72.9	4.4	252.4
Los Angeles.....	173	38	4.5	42.6	1.7	3.4	12.3	176.6	73.4	217.9	32.1	4.6	214.4
San Francisco.....	7	3	0.2	2.4	-	-	-	-	-	-	-	(NA)	(NA)
Santa Barbara.....	21	4	0.4	3.2	0.3	0.7	2.5	47.0	10.0	52.8	4.3	0.5	50.2
Ventura.....	35	11	1.0	8.7	0.7	1.6	6.1	66.0	15.0	64.0	17.0	1.1	82.2
Offshore.....	14	7	0.7	6.6	0.4	0.8	3.0	132.8	114.7	144.8	102.7	0.1	76.3

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (Z) Under 50 thousand (or under 50 employees).

¹The figures for number of "county establishments" represent the number of operations in separate counties as indicated by the county figures included in reports received. The latter reports usually represented all operations of a company in one State or district. The figures for number of establishments shown elsewhere represent the number of reports received.

²Not shown since the cost of supplies used, etc., and purchased machinery installed exceeds value of shipments and receipts and capital expenditure.

Table 2B. General Statistics for the Industry, by County: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued													
Oklahoma:													
Beaver.....	76	-	0.1	1.0	0.1	0.2	0.6	33.5	9.6	39.3	3.8	0.1	26.4
Caddo.....	35	2	0.1	0.8	0.1	0.2	0.5	19.8	5.1	23.7	1.3	0.2	8.6
Carter.....	121	7	0.8	5.8	0.6	1.1	3.7	48.3	14.5	57.2	5.6	1.2	35.7
Creek.....	90	7	0.5	3.0	0.3	0.6	1.8	29.0	7.5	31.9	4.6	0.8	24.2
Garfield.....	70	3	0.2	1.4	0.1	0.2	0.7	31.8	9.9	32.9	8.7	0.2	13.7
Garvin.....	89	4	0.3	2.5	0.2	0.4	1.3	45.8	10.3	52.9	3.2	0.4	51.6
Grady.....	47	2	0.2	1.1	0.1	0.2	0.7	20.5	6.6	22.5	4.6	0.2	13.6
Kingfisher.....	66	4	0.2	1.8	0.2	0.4	1.3	33.5	11.7	35.9	9.3	0.2	23.6
Lincoln.....	75	-	0.1	0.7	0.1	0.2	0.5	6.2	2.0	7.7	0.5	0.3	15.5
Major.....	50	1	0.1	0.9	0.1	0.2	0.6	20.1	8.5	21.5	7.1	(Z)	11.8
Nowata.....	14	1	0.1	0.7	0.1	0.2	0.6	1.3	0.9	1.7	0.5	0.2	3.7
Oklahoma.....	168	32	2.9	25.2	1.1	2.1	7.7	26.7	5.4	26.2	5.9	2.6	32.2
Okmulgee.....	61	1	0.2	0.9	0.1	0.3	0.7	3.1	1.0	3.2	0.8	0.2	4.0
Osage.....	94	10	0.9	6.6	0.5	1.0	3.2	43.0	12.9	49.3	6.6	1.0	49.9
Payne.....	74	-	0.2	0.9	0.1	0.2	0.7	4.9	1.7	6.0	0.5	0.2	4.7
Pontotoc.....	66	-	0.1	0.8	0.1	0.2	0.6	7.8	(D)	8.5	(D)	0.3	7.4
Pottawatomie.....	74	-	0.1	0.5	0.1	0.1	0.4	6.2	1.5	7.2	0.5	0.2	6.6
Seminole.....	91	5	0.4	2.3	0.3	0.5	1.5	16.0	5.1	18.5	2.6	0.5	16.9
Stephens.....	106	5	0.4	2.7	0.3	0.6	2.0	60.3	20.9	74.2	7.0	0.6	47.8
Texas.....	45	5	0.2	1.8	0.2	0.3	1.2	53.2	11.7	58.9	6.0	0.2	30.1
Tulsa.....	185	18	5.2	49.4	0.9	1.6	5.3	10.6	2.5	8.5	4.6	5.0	8.1
Washington.....	47	3	1.4	11.3	0.2	0.3	0.9	1.6	(D)	1.8	(D)	1.5	9.7
Texas:													
Anderson.....	46	2	0.2	1.3	0.1	0.3	1.0	29.8	4.4	32.3	1.8	0.2	250.3
Andrews.....	101	8	0.8	6.6	0.5	0.9	3.8	192.4	55.6	227.6	20.4	0.8	170.0
Archer.....	91	3	0.4	2.1	0.3	0.6	1.5	14.7	5.5	17.9	2.2	0.4	17.8
Atascosa.....	30	3	0.2	1.7	0.2	0.3	1.3	16.6	2.8	18.7	0.7	0.3	14.1
Bexar.....	66	6	0.3	2.6	0.1	0.2	0.5	0.9	0.4	0.6	0.7	0.4	6.2
Brazoria.....	58	3	0.5	4.1	0.3	0.6	2.5	112.4	20.3	123.5	9.2	0.5	97.5
Caldwell.....	32	-	0.1	0.7	0.1	0.2	0.6	6.8	3.3	8.0	2.2	0.2	7.8
Clay.....	51	-	0.1	0.6	0.1	0.2	0.4	7.9	3.8	10.2	1.5	0.2	9.5
Cooke.....	67	6	0.4	2.5	0.3	0.6	1.7	19.9	5.1	22.9	2.2	0.4	23.9
Crane.....	64	4	0.3	2.4	0.2	0.4	1.3	122.8	32.9	144.1	11.6	0.4	90.8
Crockett.....	67	3	0.2	1.3	0.1	0.3	1.0	27.1	12.4	27.5	12.0	0.2	18.7
Dallas.....	145	20	3.9	37.0	0.3	0.5	0.9	3.0	1.1	1.9	2.1	4.0	10.2
Duval.....	57	3	0.2	1.7	0.2	0.4	1.3	25.3	5.1	26.0	4.4	0.4	32.4
Ector.....	101	16	11.1	0.9	1.7	6.5	199.6	54.9	226.7	27.8	1.3	178.2	-
Fort Bend.....	33	2	0.2	1.9	0.1	0.3	0.9	47.8	8.8	51.7	4.9	0.3	20.4
Gaines.....	75	4	0.2	1.8	0.1	0.3	1.1	69.5	18.0	82.6	5.0	0.3	71.4
Galveston.....	28	2	0.2	1.7	0.1	0.2	0.8	41.4	6.8	42.3	6.0	0.2	51.8
Gray.....	68	8	0.6	4.4	0.4	0.8	2.9	32.5	9.0	36.0	5.5	0.6	34.3
Gregg.....	171	13	1.0	6.5	0.6	1.2	3.6	82.5	10.8	89.4	3.9	1.2	79.3
Hardin.....	33	1	0.1	0.8	0.1	0.2	0.6	24.0	3.8	24.1	3.7	0.2	18.6
Harris.....	223	51	8.4	89.5	0.8	1.5	5.2	59.5	13.1	60.4	12.1	10.0	53.7
Hidalgo.....	46	2	0.1	1.0	0.1	0.2	0.6	43.7	7.6	45.0	6.3	0.2	37.0
Hockley.....	44	4	0.3	2.2	0.2	0.3	1.2	55.9	18.7	64.7	9.9	0.3	35.8
Howard.....	78	5	0.3	2.5	0.3	0.6	1.9	37.9	9.1	41.8	5.3	0.3	30.9
Hutchinson.....	67	8	0.6	4.1	0.3	0.6	2.1	20.6	5.7	24.2	2.0	1.0	36.2
Jack.....	66	1	0.2	0.9	0.1	0.3	0.7	8.5	4.5	10.8	2.2	0.3	10.2
Jackson.....	62	1	0.2	1.0	0.1	0.2	0.7	54.4	9.1	57.4	6.1	0.2	43.7
Jefferson.....	50	7	1.1	10.6	0.3	0.7	2.4	41.9	7.4	42.9	6.5	1.3	50.8
Jim Wells.....	51	1	0.3	1.6	0.2	0.3	1.3	73.4	14.6	85.3	2.8	0.2	57.6
Liberty.....	42	4	0.3	2.2	0.2	0.4	1.2	30.1	9.2	32.0	7.3	0.4	30.0
Matagorda.....	51	3	0.2	1.7	0.1	0.2	0.7	59.7	11.1	63.4	7.5	0.3	52.6
Midland.....	149	33	3.6	34.6	1.0	2.0	7.7	40.2	15.5	41.7	13.9	3.8	73.2
Montague.....	64	2	0.2	1.2	0.2	0.3	1.1	9.2	3.0	10.9	1.4	0.2	13.3
Montgomery.....	35	3	0.2	2.1	0.1	0.3	1.1	26.3	4.2	28.9	1.6	0.3	20.6
Moore.....	22	3	0.1	0.9	0.1	0.2	0.7	33.5	(D)	36.8	(D)	0.1	21.3
Nolan.....	36	2	0.1	1.2	0.1	0.2	0.7	14.6	3.0	15.7	2.0	0.1	12.8
Nueces.....	112	17	1.8	16.1	0.7	1.3	4.9	84.2	28.3	83.6	28.9	2.0	51.3
Ochiltree.....	49	-	0.1	0.8	0.1	0.1	0.5	20.9	10.7	23.6	8.0	0.2	28.6
Panola.....	43	1	0.1	1.0	0.1	0.2	0.8	29.5	3.5	31.6	1.4	0.3	39.0

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	United States				North East Region				East North Central Division	
	Total	Offshore	Crude petroleum sub-industry	Natural gas sub-industry	Total	Crude petroleum sub-industry	Natural gas sub-industry	Pennsylvania	Total	Illinois
Establishments, total.....number..	8,796	99	7,278	1,518	470	351	119	364	818	305
With 1 to 19 employees.....do....	7,762	72	6,422	1,340	436	330	106	341	753	269
With 20 to 99 employees.....do....	797	17	650	147	29	17	12	18	59	34
With 100 or more employees.....do....	237	10	206	31	5	4	1	5	6	5
All employees (average for year).....1,000..	126.4	3.1	106.8	19.6	3.3	2.1	1.2	2.6	5.8	3.2
Payroll (all employees), total for year..million dollars..	1,049.1	29.7	901.7	147.4	23.5	15.5	8.0	16.6	37.4	20.2
Production, development, and exploration workers:										
Average for the year.....1,000..	66.2	2.3	54.9	11.2	2.2	1.3	0.9	1.9	4.3	2.6
March.....do....	66.4	2.3	55.3	11.1	2.2	1.3	0.9	1.8	4.3	2.6
May.....do....	65.9	2.3	54.7	11.2	2.3	1.3	0.9	1.9	4.3	2.6
August.....do....	67.6	2.5	55.9	11.7	2.3	1.3	1.0	1.9	4.4	2.7
November.....do....	64.8	2.3	54.0	10.9	2.2	1.3	0.9	1.8	4.3	2.6
Man-hours, total.....millions..	130.0	5.1	107.7	22.3	4.4	2.4	2.0	3.8	7.8	4.8
Wages.....million dollars..	440.3	20.6	365.6	74.7	11.4	6.1	5.3	10.0	23.9	14.9
Supplemental labor cost not included in payroll.....do....	87.2	4.8	71.1	16.1	1.7	0.6	1.0	1.5	3.4	2.3
Legally required expenditures, including Social Security contributions.....do....	32.3	1.2	26.5	5.8	0.8	0.4	0.4	0.7	1.6	1.0
Payments for voluntary programs.....do....	54.9	3.6	44.6	10.3	0.9	0.3	0.6	0.9	1.9	1.3
Cost of supplies, total.....do....	3,308.3	759.2	2,771.8	536.5	17.3	9.1	8.2	14.6	76.9	44.7
Supplies used, minerals received for preparation, and purchased machinery.....do....	1,630.9	317.6	1,338.2	292.7	7.8	3.5	4.4	6.8	39.8	23.3
Cost of resales.....do....	3.0	-	2.9	0.1	1.0	1.0	(Z)	1.0	0.2	0.1
Purchased fuels consumed.....do....	48.6	8.3	43.7	4.9	0.8	0.7	0.1	0.7	2.1	1.8
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	8,352.3	211.9	7,967.3	384.9	60.4	58.5	1.9	48.3	509.2	445.4
Cost.....million dollars..	105.4	2.3	100.2	5.2	1.1	1.1	(Z)	0.9	7.6	6.5
Generated less sold.....million kw.-hrs..	510.2	327.4	476.6	33.5	(Z)	0.1	0.1	(Z)	3.8	3.7
Contract work.....million dollars..	1,519.8	431.2	1,286.3	233.6	6.6	2.8	3.7	5.2	27.3	13.2
Value of shipments and receipts (including resales), total.....do....	11,731.7	1,361.3	9,648.7	2,082.9	53.5	29.0	24.5	44.6	247.4	166.3
Value of resales.....do....	3.0	-	2.9	0.1	1.0	1.0	(Z)	1.0	0.1	0.1
Value added in mining.....million dollars..	10,965.0	1,385.4	8,943.0	2,022.1	46.3	24.0	22.3	38.6	213.0	144.7
Capital expenditures (except land and mineral rights), total.....do....	2,541.6	783.3	2,066.1	475.6	10.1	4.1	6.0	8.7	42.6	23.1
Mineral development and exploration.....do....	1,372.4	469.2	1,114.0	258.4	5.9	2.3	3.5	5.0	18.0	8.7
New structures and additions.....do....	364.8	140.3	293.6	71.2	0.6	0.2	0.4	0.4	6.0	4.0
New machinery and equipment.....do....	759.1	170.6	622.1	137.1	3.0	1.1	1.9	2.8	15.0	9.0
Used plant and equipment.....do....	45.4	3.2	36.4	8.9	0.6	0.5	0.1	0.5	3.6	1.4
Mineral development and exploration expenditures, total.....do....	1,938.9	588.6	1,553.9	385.0	9.6	4.2	5.3	7.7	28.9	13.0
Capitalized.....do....	1,372.4	469.2	1,114.0	258.4	5.9	2.3	3.5	5.0	18.0	8.7
Expensed.....do....	566.5	119.4	439.9	126.6	3.7	1.9	1.8	2.7	10.9	4.3
Crude petroleum shipments by ownership...million barrels..	3,043.7	681.6	2,809.5	234.3	5.6	5.5	(Z)	3.8	76.9	54.6
Operator accounts:										
Royalty.....do....	342.7	384.8	314.9	27.9	0.3	0.3	(Z)	0.2	7.3	5.2
Oil production payments.....do....	102.4	8.9	92.6	9.8	0.4	0.4	-	0.4	2.7	1.1
Net operator accounts.....do....	1,796.2	203.3	1,672.0	124.2	2.8	2.7	(Z)	2.2	44.4	32.5
Accounts of others.....do....	699.9	83.3	627.9	72.0	(Z)	(Z)	(Z)	(Z)	14.1	10.3
Undistributed.....do....	102.5	1.3	102.1	0.4	2.1	2.1	(Z)	1.0	8.4	5.5
Natural gas shipments by ownership.....billion cu. ft..	17,126.1	(NA)	9,118.9	8,007.3	75.5	2.1	73.3	72.4	50.6	0.2
Operator accounts:										
Royalty.....do....	2,003.1	1,606.4	1,099.7	903.4	2.8	0.1	2.7	2.8	4.6	(Z)
Gas production payments.....do....	643.3	368.7	236.8	406.6	10.9	1.0	9.8	10.6	1.4	(Z)
Net operator accounts.....do....	10,029.9	8,086.4	5,778.0	4,251.8	48.5	1.0	47.5	46.2	34.1	0.1
Accounts of others.....do....	3,817.2	3,234.8	1,985.7	1,831.5	4.4	-	4.4	4.4	4.1	0.1
Undistributed.....do....	632.6	(NA)	18.6	614.0	8.9	-	8.9	8.4	6.5	-
Man-hours worked by production, development and exploration workers, total.....man-hours..	130.0	5.1	107.7	22.3	4.4	2.4	2.0	3.8	7.8	4.8
Operating and maintaining wells.....do....	108.8	4.3	92.0	16.8	4.0	2.4	1.6	3.5	7.1	4.4
Drilling wells and rig building.....do....	8.6	0.2	7.0	1.6	0.3	0.1	0.2	0.2	0.5	0.2
Exploration work (except drilling wells).....do....	7.7	0.5	5.5	2.2	(Z)	(Z)	(Z)	(Z)	0.1	(Z)
Other work.....do....	4.8	(Z)	3.2	1.7	0.1	(Z)	0.1	0.1	0.2	0.1

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	West North Central Division				South Atlantic Division		East South Central Division			
	Total	Crude petroleum sub-industry	Natural gas sub-industry	Kansas	Total	Natural gas sub-industry	Total	Crude petroleum sub-industry	Kentucky	Mississippi
Establishments, total.....number..	681	623	58	521	584	298	331	289	189	107
With 1 to 19 employees.....do....	595	545	50	445	564	286	292	255	173	85
With 20 to 99 employees.....do....	79	73	6	72	14	8	33	29	13	19
With 100 or more employees.....do....	7	5	2	4	6	4	6	5	3	3
All employees (average for year).....1,000..	7.1	5.7	1.4	5.3	2.8	1.7	3.5	2.6	1.9	1.5
Payroll (all employees), total for year..million dollars..	48.4	36.6	11.8	33.4	17.2	10.0	23.9	18.3	10.6	12.5
Production, development, and exploration workers:										
Average for the year.....1,000..	4.5	4.1	0.4	4.0	2.1	1.3	2.5	1.8	1.6	0.9
March.....do....	4.5	4.1	0.4	4.0	2.1	1.2	2.9	1.8	1.9	0.8
May.....do....	4.5	4.1	0.4	4.0	2.1	1.3	2.9	1.8	2.0	0.8
August.....do....	4.6	4.1	0.5	4.0	2.2	1.3	3.2	1.9	2.2	0.9
November.....do....	4.5	4.1	0.4	4.0	2.0	1.2	2.9	1.8	2.0	0.8
Man-hours, total.....millions..	8.7	7.8	0.9	7.7	4.0	2.3	5.1	3.8	3.0	1.9
Wages.....million dollars..	25.5	22.4	3.1	22.0	9.9	6.3	14.5	10.5	8.0	6.0
Supplemental labor cost not included in payroll.....do....	3.6	3.2	0.4	3.1	1.3	1.0	2.6	1.6	1.3	1.2
Legally required expenditures, including Social Security contributions.....do....	1.9	1.7	0.2	1.6	0.6	0.4	1.5	0.8	0.7	0.5
Payments for voluntary programs.....do....	1.8	1.6	0.3	1.6	0.7	0.5	1.4	0.9	0.7	0.7
Cost of supplies, total.....do....	124.3	112.4	11.9	88.0	28.3	17.6	78.4	70.0	13.4	60.0
Supplies used, minerals received for preparation, and purchased machinery.....do....	63.1	55.8	7.3	44.4	14.2	9.5	33.8	29.7	6.8	26.4
Cost of resales.....do....	0.1	0.1	-	0.1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Purchased fuels consumed.....do....	6.6	6.1	0.5	5.6	0.2	0.2	1.4	1.3	0.3	1.0
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	542.6	479.6	63.0	477.7	9.4	1.7	205.7	195.5	96.5	53.2
Cost.....million dollars..	8.3	7.7	0.6	7.0	0.2	(Z)	2.9	2.8	1.2	0.9
Generated less sold.....million kw.-hrs..	1.7	1.7	-	1.6	-	-	3.6	2.7	0.1	3.5
Contract work.....million dollars..	46.4	42.9	3.5	31.0	13.7	7.9	39.8	36.2	5.1	31.6
Value of shipments and receipts (including resales), total.....do....	459.7	357.3	102.4	366.5	76.4	59.7	239.6	200.4	54.3	164.9
Value of resales.....do....	0.1	0.1	(Z)	0.1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Value added in mining.....million dollars..	394.6	298.2	96.4	319.2	71.7	59.5	217.4	178.8	51.6	147.7
Capital expenditures (except land and mineral rights), total.....do....	59.2	53.3	5.9	40.7	23.7	17.5	56.1	48.3	10.6	42.8
Mineral development and exploration.....do....	23.1	21.3	1.8	17.0	12.0	8.3	31.9	28.0	6.0	24.1
New structures and additions.....do....	4.3	4.0	0.3	2.9	3.3	3.0	6.2	5.2	1.1	5.0
New machinery and equipment.....do....	21.9	20.9	1.0	13.2	8.3	6.2	16.1	13.4	3.4	12.2
Used plant and equipment.....do....	9.9	7.1	2.8	7.7	0.1	(Z)	1.8	1.8	0.2	1.4
Mineral development and exploration expenditures, total.....do....	43.2	40.2	3.0	31.3	20.7	12.2	49.1	41.8	10.1	35.3
Capitalized.....do....	23.1	21.3	1.8	17.0	12.0	8.3	34.2	28.0	8.2	24.1
Expensed.....do....	20.1	18.9	1.2	14.3	8.8	4.0	14.9	13.8	1.9	11.2
Crude petroleum shipments by ownership...million barrels..	118.1	111.3	6.8	84.9	8.2	3.4	136.5	135.6	12.1	50.2
Operator accounts:										
Royalty.....do....	13.0	12.1	0.9	8.9	0.7	0.4	13.6	13.6	1.0	4.8
Oil production payments.....do....	5.1	4.7	0.4	3.7	0.1	0.1	4.3	4.3	0.6	1.5
Net operator accounts.....do....	66.4	61.9	4.5	46.1	5.6	2.8	66.1	65.2	6.9	25.0
Accounts of others.....do....	27.8	26.8	1.0	21.0	0.1	0.1	49.6	49.6	2.0	17.8
Undistributed.....do....	5.8	5.8	(Z)	5.2	1.7	(Z)	2.9	2.9	1.6	1.1
Natural gas shipments by ownership.....billion cu. ft..	915.3	296.7	618.7	873.8	(NA)	200.8	197.3	67.0	64.3	133.0
Operator accounts:										
Royalty.....do....	115.3	36.1	79.2	110.5	(NA)	27.0	21.1	6.6	8.0	13.1
Gas production payments.....do....	69.2	2.4	66.8	68.5	(NA)	37.8	0.8	0.3	0.2	0.6
Net operator accounts.....do....	573.8	207.4	366.4	544.0	(NA)	109.1	124.5	39.9	46.6	77.9
Accounts of others.....do....	78.6	47.3	31.3	72.4	(NA)	6.7	41.0	19.1	0.2	40.8
Undistributed.....do....	78.4	3.5	74.9	78.4	(NA)	20.1	9.9	1.1	9.3	0.5
Man-hours worked by production, development and exploration workers, total.....man-hours..	8.7	7.8	0.9	7.7	4.0	2.3	5.1	3.8	3.0	1.9
Operating and maintaining wells.....do....	7.2	6.5	0.7	6.4	3.1	1.6	3.3	2.9	2.0	1.2
Drilling wells and rig building.....do....	1.0	0.9	0.1	0.9	0.4	0.3	0.8	0.6	0.3	0.4
Exploration work (except drilling wells).....do....	0.3	0.3	(Z)	0.2	0.1	(Z)	0.3	0.3	(Z)	0.2
Other work.....do....	0.2	0.2	(Z)	0.2	0.4	0.4	0.7	0.1	0.7	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	West South Central Division									
	Total	Offshore	Crude petroleum sub-industry	Natural gas sub-industry	Arkansas	Louisiana				
						Total	Crude petroleum sub-industry	Natural gas sub-industry	North Louisiana	South and offshore Louisiana
Establishments, total.....number..	4,667	51	3,919	748	127	522	366	156	248	274
With 1 to 19 employees.....do....	4,074	35	3,438	636	118	406	294	112	209	117
With 20 to 99 employees.....do....	437	9	346	91	9	79	44	35	34	45
With 100 or more employees.....do....	156	7	135	21	-	37	28	9	5	32
All employees (average for year).....1,000..	80.3	2.3	68.8	11.5	0.7	18.4	14.3	4.1	3.0	15.3
Payroll (all employees), total for year..million dollars..	690.4	20.5	599.6	90.8	4.7	166.3	132.1	34.2	22.7	143.6
Production, development, and exploration workers:										
Average for the year.....1,000..	38.1	1.9	32.0	6.0	0.5	10.3	7.8	2.5	2.0	8.3
March.....do....	38.5	1.8	32.4	6.1	0.5	10.2	7.8	2.5	2.0	8.2
May.....do....	37.9	1.8	31.8	6.1	0.5	10.3	7.8	2.5	2.0	8.2
August.....do....	38.9	1.9	32.6	6.2	0.5	10.5	8.0	2.6	2.0	8.6
November.....do....	37.2	1.8	31.3	5.8	0.6	10.1	7.7	2.4	1.9	8.2
Man-hours, total.....millions..	75.4	4.1	63.0	12.3	1.0	21.4	16.1	5.3	4.1	17.3
Wages.....million dollars..	262.5	16.1	218.9	43.5	3.1	80.5	60.9	19.6	13.1	67.4
Supplemental labor cost not included in payroll.....do....	52.4	3.7	42.0	10.4	0.5	16.8	12.4	4.3	2.0	14.7
Legally required expenditures, including Social Security contributions.....do....	18.9	0.8	15.5	3.4	0.2	5.4	3.9	1.5	1.1	4.3
Payments for voluntary programs.....do....	33.8	2.8	26.8	7.0	0.3	11.4	8.6	2.8	1.0	10.5
Cost of supplies, total.....do....	2,165.4	533.5	1,747.9	417.7	15.4	976.9	741.7	235.2	47.0	929.8
Supplies used, minerals received for preparation, and purchased machinery.....do....	1,086.1	221.6	861.2	224.9	7.0	455.6	328.1	127.4	25.1	430.4
Cost of resales.....do....	0.7	-	0.7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Purchased fuels consumed.....do....	26.8	4.9	23.6	3.2	0.7	10.2	8.6	1.6	1.6	8.6
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	3,916.9	6.5	3,634.4	282.6	52.9	183.9	153.5	30.4	68.4	115.5
Cost.....million dollars..	49.1	0.1	45.3	3.8	0.8	3.1	2.4	0.7	0.1	2.0
Generated less sold.....million kw.-hrs..	293.3	204.1	283.5	9.8	(Z)	255.5	249.0	6.5	20.4	235.0
Contract work.....million dollars..	1,002.6	307.0	816.8	185.8	6.9	508.0	402.5	105.5	19.3	488.8
Value of shipments and receipts (including resales), total.....do....	8,426.4	1,168.2	6,790.2	1,636.2	69.4	3,349.4	2,503.1	846.3	212.9	3,136.6
Value of resales.....do....	0.7	-	0.7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Value added in mining.....million dollars..	7,912.1	1,144.5	6,362.6	1,549.5	68.0	3,223.0	2,435.8	787.2	200.8	3,022.1
Capital expenditures (except land and mineral rights), total.....do....	1,651.1	509.8	1,320.3	331.0	14.0	850.4	674.3	176.0	35.0	815.4
Mineral development and exploration.....do....	872.2	313.9	684.7	187.5	9.4	458.2	361.5	96.7	12.8	445.4
New structures and additions.....do....	251.3	81.1	214.4	36.8	0.7	166.0	143.6	22.3	13.5	152.5
New machinery and equipment.....do....	501.9	111.6	400.3	101.6	3.3	221.5	167.0	54.5	8.3	213.2
Used plant and equipment.....do....	25.8	3.2	20.7	5.1	0.7	4.7	2.2	2.5	0.4	4.3
Mineral development and exploration expenditures, total.....do....	1,267.4	405.9	974.2	293.3	12.6	628.4	469.5	159.0	22.8	605.6
Capitalized.....do....	872.2	313.9	684.7	187.5	9.4	458.2	361.5	96.7	12.8	445.4
Expensed.....do....	395.2	91.9	289.5	105.7	3.2	170.2	108.0	62.2	10.0	160.2
Crude petroleum shipments by ownership...million barrels..	2,033.7	275.4	1,825.5	208.2	16.3	743.1	635.1	108.0	42.7	700.5
Operator accounts:										
Royalty.....do....	246.0	36.5	221.2	24.8	1.1	105.3	90.6	14.7	4.2	101.1
Oil production payments.....do....	70.3	8.4	62.1	8.2	0.6	19.5	14.7	4.7	2.5	17.0
Net operator accounts.....do....	1,242.3	184.3	1,133.0	109.3	6.6	485.6	423.8	61.8	21.1	464.5
Accounts of others.....do....	444.7	44.9	379.1	65.6	6.7	129.9	103.2	26.7	13.3	116.6
Undistributed.....do....	30.4	1.3	30.1	0.3	1.3	2.9	2.8	0.1	1.6	1.3
Natural gas shipments by ownership.....billion cu. ft..	13,760.1	1,673.5	7,730.2	6,051.7	129.7	5,444.9	2,692.0	2,753.1	551.0	4,950.3
Operator accounts:										
Royalty.....do....	1,598.9	211.1	948.8	650.1	10.1	660.2	345.6	314.5	41.0	619.1
Gas production payments.....do....	368.6	44.1	191.7	176.9	1.2	99.2	36.8	62.4	48.1	91.7
Net operator accounts.....do....	8,082.9	911.0	4,889.0	3,193.9	47.1	3,065.8	1,672.4	1,393.4	224.3	2,841.6
Accounts of others.....do....	3,191.4	478.3	1,689.9	1,517.3	71.0	1,394.1	636.9	757.2	166.1	1,243.8
Undistributed.....do....	524.3	29.0	10.8	513.5	0.3	225.8	0.3	225.6	71.5	154.2
Man-hours worked by production, development and exploration workers, total.....man-hours..	75.4	4.1	63.0	12.3	1.0	21.4	16.1	5.3	4.1	17.3
Operating and maintaining wells.....do....	63.5	3.6	53.9	9.6	1.0	16.9	13.0	3.9	3.0	13.9
Drilling wells and rig building.....do....	4.8	0.2	4.2	0.6	(Z)	2.4	2.2	0.3	0.9	1.6
Exploration work (except drilling wells).....do....	5.4	0.3	3.6	1.8	(Z)	1.6	0.6	0.9	0.1	1.5
Other work.....do....	1.7	(Z)	1.3	0.4	(Z)	0.4	0.3	0.2	0.1	0.3

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	West South Central Division—Continued							
	Oklahoma			Texas			Texas Gulf Coast A and offshore	Texas Gulf Coast B
	Total	Crude petroleum sub-industry	Natural gas sub-industry	Total	Crude petroleum sub-industry	Natural gas sub-industry		
Establishments, total.....number..	918	839	79	3,100	2,607	493	392	174
With 1 to 19 employees.....do....	815	741	74	2,735	2,304	431	312	155
With 20 to 99 employees.....do....	77	73	4	272	221	51	48	19
With 100 or more employees.....do....	26	25	1	93	82	11	32	-
All employees (average for year).....1,000..	16.1	15.3	0.8	45.0	38.5	6.5	12.2	1.3
Payroll (all employees), total for year..million dollars..	132.7	126.7	6.0	386.7	336.7	50.0	123.4	9.7
Production, development, and exploration workers:								
Average for the year.....1,000..	7.1	6.6	0.4	20.2	17.1	3.1	3.1	1.0
March.....do....	7.2	6.7	0.4	20.6	17.5	3.1	3.1	1.0
May.....do....	7.1	6.6	0.4	20.0	17.0	3.1	3.1	1.0
August.....do....	7.2	6.8	0.5	20.6	17.4	3.2	3.2	1.0
November.....do....	7.0	6.5	0.4	19.6	16.6	3.0	3.0	1.0
Man-hours, total.....millions..	13.5	12.7	0.8	39.5	33.4	6.1	6.4	2.1
Wages.....million dollars..	44.5	41.8	2.7	134.3	113.4	20.9	21.8	7.3
Supplemental labor cost not included in payroll.....do....	9.6	8.8	0.8	25.5	20.3	5.2	5.8	1.0
Legally required expenditures, including Social Security contributions.....do....	3.7	3.4	0.3	9.6	8.0	1.6	1.8	0.4
Payments for voluntary programs.....do....	5.9	5.4	0.5	16.2	12.5	3.6	4.0	0.7
Cost of supplies, total.....do....	227.9	208.0	19.9	945.2	787.3	157.9	151.8	45.5
Supplies used, minerals received for preparation, and purchased machinery.....do....	114.7	105.9	8.8	508.8	422.0	86.8	82.4	27.5
Cost of resales.....do....	0.1	(Z)	(Z)	0.6	0.6	(Z)	(Z)	-
Purchased fuels consumed.....do....	4.2	3.9	0.3	11.7	10.5	1.3	1.3	0.5
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	798.9	759.9	39.0	2,881.2	2,672.1	209.1	120.9	49.2
Cost.....million dollars..	10.9	10.2	0.6	34.4	31.9	2.5	1.6	0.8
Generated less sold.....million kw.-hrs..	4.3	4.3	-	33.5	30.2	3.4	6.9	(Z)
Contract work.....million dollars..	98.1	87.9	10.2	389.6	322.3	67.3	66.4	16.6
Value of shipments and receipts (including resales), total.....do....	828.3	701.7	126.6	4,179.3	3,536.8	642.5	692.8	282.3
Value of resales.....do....	0.1	(Z)	(Z)	0.6	0.6	(Z)	(Z)	-
Value added in mining.....million dollars..	758.0	635.5	122.6	3,863.1	3,245.9	617.2	653.2	266.3
Capital expenditures (except land and mineral rights), total.....do....	157.6	141.7	15.9	629.0	496.4	132.6	112.2	29.4
Mineral development and exploration.....do....	91.0	81.1	9.9	313.6	237.8	75.8	60.3	12.3
New structures and additions.....do....	11.6	10.6	1.0	73.1	59.8	13.3	11.1	4.1
New machinery and equipment.....do....	49.8	45.0	4.9	227.2	186.1	41.1	38.9	12.4
Used plant and equipment.....do....	5.3	5.1	0.2	15.1	12.7	2.4	1.9	0.6
Mineral development and exploration expenditures, total.....do....	125.2	110.5	14.7	501.2	387.8	113.5	102.4	19.6
Capitalized.....do....	91.0	81.1	9.9	313.6	237.8	75.8	60.3	12.3
Expensed.....do....	34.2	29.4	4.8	187.6	149.9	37.7	42.1	7.4
Crude petroleum shipments by ownership...million barrels..	208.9	187.4	21.4	1,064.9	986.6	78.3	145.4	61.0
Operator accounts:								
Royalty.....do....	20.9	18.3	2.5	118.6	111.2	7.5	18.3	8.3
Oil production payments.....do....	7.1	6.6	0.5	43.2	40.1	3.0	4.4	1.1
Net operator accounts.....do....	110.0	100.4	9.6	640.1	602.5	37.6	100.4	40.2
Accounts of others.....do....	63.6	54.8	8.8	244.4	214.4	30.0	19.9	10.9
Undistributed.....do....	7.3	7.3	(Z)	18.6	18.4	0.2	2.4	0.5
Natural gas shipments by ownership.....billion cu. ft..	1,392.6	985.7	406.8	6,799.0	3,997.3	2,801.7	1,428.3	637.2
Operator accounts:								
Royalty.....do....	144.5	103.7	40.8	784.3	498.0	286.3	180.6	77.5
Gas production payments.....do....	69.9	40.3	29.6	198.3	114.5	83.8	45.7	10.4
Net operator accounts.....do....	737.6	539.1	198.5	4,232.4	2,664.3	1,568.1	926.0	393.3
Accounts of others.....do....	387.7	301.6	86.1	1,338.6	711.1	627.6	258.5	147.7
Undistributed.....do....	52.9	1.0	51.9	245.1	8.9	236.2	17.6	8.3
Man-hours worked by production, development and exploration workers, total.....man-hours..	13.5	12.7	0.8	39.5	33.4	6.1	6.4	2.1
Operating and maintaining wells.....do....	10.9	10.2	0.7	34.6	30.0	4.9	5.6	1.8
Drilling wells and rig building.....do....	1.1	1.0	0.1	1.2	1.0	0.2	0.1	(Z)
Exploration work (except drilling wells).....do....	0.9	0.9	(Z)	2.9	2.1	0.8	0.6	0.2
Other work.....do....	0.5	0.5	(Z)	0.8	0.6	0.2	0.1	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	West South Central Division--Continued										
	South Texas			South-west Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas A	West Texas B	Texas Pan-handles
	Total	Crude petroleum sub-industry	Natural gas sub-industry								
Establishments, total.....number..	226	151	75	188	412	272	276	355	461	157	187
With 1 to 19 employees.....do....	193	130	63	176	376	257	245	320	398	145	158
With 20 to 99 employees.....do....	23	14	9	11	33	15	18	29	38	12	26
With 100 or more employees.....do....	10	7	3	1	3	-	13	6	25	-	3
All employees (average for year).....1,000..	3.4	2.3	1.2	1.1	2.9	1.5	5.5	3.0	10.9	0.8	2.3
Payroll (all employees), total for year..million dollars..	29.2	19.8	9.4	7.6	18.1	9.8	51.1	21.0	93.7	5.9	17.1
Production, development, and exploration workers:											
Average for the year.....1,000..	1.8	1.1	0.7	0.7	2.3	1.1	0.8	2.0	5.2	0.6	1.5
March.....do....	1.9	1.2	0.7	0.7	2.3	1.1	1.2	2.1	5.2	0.6	1.5
May.....do....	1.9	1.2	0.7	0.7	2.3	1.1	0.6	2.0	5.2	0.6	1.5
August.....do....	1.8	1.2	0.7	0.7	2.4	1.1	0.6	2.1	5.4	0.7	1.5
November.....do....	1.7	1.1	0.6	0.7	2.3	1.1	0.6	2.0	5.1	0.6	1.4
Man-hours, total.....millions..	3.6	2.2	1.3	1.3	4.5	2.2	1.2	4.0	10.2	1.2	2.8
Wages.....million dollars..	12.9	8.1	4.8	4.4	12.7	6.7	2.9	12.9	38.4	4.3	9.8
Supplemental labor cost not included in payroll.....do....	2.4	1.3	1.1	0.7	1.6	0.9	0.6	2.1	7.9	0.6	1.9
Legally required expenditures, including Social Security contributions.....do....	0.8	0.5	0.3	0.3	0.9	0.5	0.3	0.8	2.9	0.3	0.6
Payments for voluntary programs.....do....	1.6	0.9	0.7	0.4	0.8	0.4	0.3	1.3	5.0	0.3	1.3
Cost of supplies, total.....do....	101.3	55.5	45.8	18.8	54.4	26.7	19.5	55.7	349.8	67.0	54.7
Supplies used, minerals received for preparation, and purchased machinery.....do....	63.2	35.6	27.6	8.5	28.3	13.9	10.1	29.6	182.2	36.1	26.8
Cost of resales.....do....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.5	(Z)	-	(Z)
Purchased fuels consumed.....do....	0.8	0.5	0.3	0.2	1.4	0.6	0.2	1.2	4.4	0.5	0.6
Electric energy:											
Purchased:											
Quantity.....million kw.-hrs..	90.7	68.5	22.3	235.0	387.2	95.7	23.2	199.3	1,386.8	125.8	167.4
Cost.....million dollars..	1.4	1.1	0.3	1.9	5.1	1.7	0.4	2.6	15.0	1.9	1.9
Generated less sold.....million kw.-hrs..	4.8	5.6	0.8	1.5	1.7	5.3	0.7	1.0	5.6	15.6	(Z)
Contract work.....million dollars..	35.8	18.4	17.5	8.1	19.6	10.4	8.9	21.7	148.1	28.5	25.4
Value of shipments and receipts (including resales), total.....do....	511.3	348.1	163.2	68.5	182.3	103.9	89.7	380.5	1,460.8	185.0	222.2
Value of resales.....do....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.5	(Z)	-	-
Value added in mining.....million dollars..	498.5	339.1	159.4	64.5	154.1	90.9	85.8	356.2	1,320.8	165.7	207.2
Capital expenditures (except land and mineral rights), total.....do....	88.5	46.6	41.9	14.8	26.2	13.7	15.6	31.4	209.8	47.8	39.7
Mineral development and exploration.....do....	48.2	24.3	23.9	9.2	11.0	5.3	9.4	13.6	93.2	26.5	24.8
New structures and additions.....do....	15.0	11.0	4.0	1.0	1.5	1.2	1.3	2.9	27.1	5.7	2.3
New machinery and equipment.....do....	24.2	10.5	13.7	4.3	11.3	6.2	4.3	13.3	86.0	14.3	11.9
Used plant and equipment.....do....	1.1	0.8	0.3	0.3	2.4	0.9	0.6	1.6	3.5	1.2	0.8
Mineral development and exploration expenditures, total.....do....	63.0	28.9	34.7	22.5	19.2	8.7	14.6	42.7	136.6	37.9	33.3
Capitalized.....do....	47.6	24.3	23.9	9.2	11.0	5.3	9.4	13.6	93.2	26.5	24.8
Expensed.....do....	15.4	4.6	10.8	13.3	8.3	3.4	5.3	29.1	43.5	11.4	8.5
Crude petroleum shipments by ownership...million barrels..	97.4	78.1	19.4	26.2	54.4	61.8	13.8	101.4	455.7	52.1	29.1
Operator accounts:											
Royalty.....do....	13.3	11.2	2.1	2.1	5.3	34.6	1.9	10.2	45.6	6.4	3.4
Oil production payments.....do....	2.5	1.6	1.0	9.9	1.8	3.6	0.3	2.8	22.7	2.9	0.6
Net operator accounts.....do....	64.2	53.4	10.8	11.1	30.8	14.7	1.2	62.2	257.8	30.2	20.2
Accounts of others.....do....	16.1	10.7	5.4	2.2	14.8	8.4	7.6	22.9	124.8	12.1	4.5
Undistributed.....do....	1.3	1.2	0.1	0.9	1.7	0.5	2.8	3.3	4.8	0.5	0.4
Natural gas shipments by ownership.....billion cu. ft..	1,323.0	655.3	667.7	136.0	128.9	62.9	160.0	581.8	1,130.1	243.3	967.2
Operator accounts:											
Royalty.....do....	178.3	98.9	79.4	30.7	13.6	5.9	11.5	51.2	119.7	27.9	87.4
Gas production payments.....do....	33.5	7.2	26.4	7.2	2.7	10.0	0.3	13.3	53.4	6.7	15.1
Net operator accounts.....do....	823.2	490.4	332.9	73.1	80.5	27.4	68.7	242.9	683.6	147.1	766.5
Accounts of others.....do....	268.1	58.4	209.7	22.7	59.8	9.1	18.3	109.1	266.8	55.7	122.9
Undistributed.....do....	19.8	0.5	19.3	-2.2	-27.7	10.5	61.2	165.3	6.6	5.9	-24.7
Man-hours worked by production, development and exploration workers, total.....man-hours..	3.6	2.2	1.3	1.3	4.5	2.2	1.2	4.0	10.2	1.2	2.8
Operating and maintaining wells.....do....	3.2	2.1	1.1	1.1	4.0	1.9	0.8	3.8	8.9	0.9	2.6
Drilling wells and rig building.....do....	(Z)	(Z)	(Z)	(Z)	0.2	0.1	(Z)	(Z)	0.3	0.2	(Z)
Exploration work (except drilling wells).....do....	0.3	0.1	0.2	0.2	0.1	0.1	0.3	0.1	0.7	0.1	0.2
Other work.....do....	0.1	(Z)	0.1	(Z)	0.1	0.1	(Z)	(Z)	0.2	(Z)	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	Mountain Division								
	Total	Crude petroleum sub-industry	Natural gas sub-industry	Montana	Wyoming	Colorado	New Mexico	West New Mexico	East New Mexico
Establishments, total.....number..	769	634	135	107	149	165	264	68	196
With 1 to 19 employees.....do....	670	550	120	99	124	137	233	61	172
With 20 to 99 employees.....do....	83	69	14	8	20	22	26	6	20
With 100 or more employees.....do....	16	15	1	-	5	6	5	1	4
All employees (average for year).....1,000..	9.0	7.2	1.7	0.6	2.1	2.6	3.3	1.2	2.1
Payroll (all employees), total for year..million dollars..	76.2	63.4	12.8	4.5	18.2	26.9	23.7	8.1	15.5
Production, development, and exploration workers:									
Average for the year.....1,000..	4.7	3.6	1.1	0.4	1.2	0.7	2.1	0.7	1.3
March.....do....	4.7	3.6	1.1	0.4	1.2	0.7	2.1	0.7	1.3
May.....do....	4.7	3.6	1.1	0.4	1.2	0.7	2.1	0.7	1.3
August.....do....	4.9	3.7	1.1	0.4	1.3	0.8	2.2	0.8	1.4
November.....do....	4.7	3.6	1.1	0.4	1.2	0.7	2.1	0.7	1.4
Man-hours, total.....millions..	9.3	7.1	2.1	0.8	2.4	1.4	4.1	1.5	2.6
Wages.....million dollars..	33.2	25.5	7.7	2.7	9.5	5.7	13.4	4.8	8.6
Supplemental labor cost not included in payroll.....do....	7.4	5.8	1.6	0.5	1.9	2.1	2.5	0.9	1.5
Legally required expenditures, including Social Security contributions.....do....	2.6	2.0	0.6	0.2	0.7	0.6	1.0	0.4	0.6
Payments for voluntary programs.....do....	4.8	3.8	1.0	0.3	1.3	1.5	1.5	0.5	0.9
Cost of supplies, total.....do....	318.1	278.9	39.1	28.5	102.2	35.6	124.0	24.3	99.7
Supplies used, minerals received for preparation, and purchased machinery.....do....	162.6	142.1	20.6	13.6	51.8	17.7	68.8	13.2	55.6
Cost of resales.....do....	(Z)	(Z)	(Z)	-	(Z)	(Z)	(Z)	-	(Z)
Purchased fuels consumed.....do....	4.1	3.8	0.3	0.3	1.8	0.6	1.1	0.2	0.9
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	1,254.1	1,238.1	16.0	115.1	607.1	126.7	297.9	18.1	279.7
Cost.....million dollars..	15.1	14.7	0.4	1.2	6.7	1.7	4.2	0.4	3.8
Generated less sold.....million kw.-hrs..	15.4	11.3	4.1	0.1	10.4	2.3	1.2	1.2	(Z)
Contract work.....million dollars..	137.1	119.1	17.9	13.4	41.9	15.6	49.9	10.5	39.4
Value of shipments and receipts (including resales), total.....do....	1,134.0	1,017.7	116.4	80.8	399.7	104.5	470.3	91.2	379.2
Value of resales.....do....	(Z)	(Z)	(Z)	-	(Z)	(Z)	(Z)	-	(Z)
Value added in mining.....million dollars..	1,051.7	937.3	114.3	75.0	359.5	94.3	447.3	92.0	355.2
Capital expenditures (except land and mineral rights), total.....do....	235.7	198.6	37.1	22.7	61.9	25.5	101.0	25.2	75.8
Mineral development and exploration.....do....	135.1	113.5	21.6	11.6	33.1	15.2	56.9	14.3	42.6
New structures and additions.....do....	26.6	18.1	8.6	3.0	7.0	2.8	12.3	6.0	6.4
New machinery and equipment.....do....	71.0	64.6	6.4	7.9	21.5	6.8	30.1	4.7	25.4
Used plant and equipment.....do....	2.9	2.4	0.5	0.2	0.4	0.6	1.6	0.2	1.4
Mineral development and exploration expenditures, total.....do....	185.2	155.1	30.0	17.4	49.1	21.6	69.7	16.5	53.2
Capitalized.....do....	135.1	113.5	21.6	11.6	33.1	15.2	56.9	14.3	42.6
Expensed.....do....	50.0	41.6	8.4	5.8	16.0	6.4	12.8	2.2	10.5
Crude petroleum shipments by ownership...million barrels..	356.3	346.1	10.2	31.5	141.9	31.9	123.6	10.4	113.4
Operator accounts:									
Royalty.....do....	37.4	36.1	1.3	3.8	14.9	2.8	13.2	1.0	12.3
Oil production payments.....do....	9.7	8.6	1.1	0.2	4.0	0.5	4.8	0.4	4.4
Net operator accounts.....do....	190.0	185.2	4.8	18.4	70.3	15.0	70.7	4.9	65.8
Accounts of others.....do....	108.7	105.7	3.0	8.2	50.4	12.5	29.1	3.5	25.6
Undistributed.....do....	10.5	10.5	(Z)	0.9	2.3	1.1	5.8	0.6	5.3
Natural gas shipments by ownership.....billion cu. ft..	1,351.2	668.8	682.4	24.2	221.0	91.5	970.9	489.4	481.4
Operator accounts:									
Royalty.....do....	174.3	76.3	98.0	6.2	21.8	9.7	131.8	72.0	59.8
Gas production payments.....do....	130.7	33.6	97.1	(Z)	18.1	7.2	104.6	73.3	31.3
Net operator accounts.....do....	719.1	397.4	321.7	16.2	126.2	52.8	497.1	243.4	283.7
Accounts of others.....do....	322.9	159.7	163.2	1.5	49.8	19.3	241.9	126.5	115.4
Undistributed.....do....	4.4	1.9	2.5	0.3	5.1	2.5	-4.5	4.2	-8.5
Man-hours worked by production, development and exploration workers, total.....man-hours..	9.3	7.1	2.1	0.8	2.4	1.4	4.1	1.5	2.6
Operating and maintaining wells.....do....	7.9	6.2	1.7	0.6	2.1	0.9	3.9	1.4	2.5
Drilling wells and rig building.....do....	0.2	0.1	(Z)	(Z)	0.1	(Z)	(Z)	(Z)	(Z)
Exploration work (except drilling wells).....do....	1.0	0.7	0.2	0.1	0.3	0.4	0.1	(Z)	0.1
Other work.....do....	0.2	0.1	0.1	-	(Z)	0.1	0.1	(Z)	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	Pacific Division					
	Total	Offshore	California	East Central California	Central Coastal California	South California
Establishments, total.....number..	475	31	429	119	49	200
With 1 to 19 employees.....do....	377	20	339	95	37	159
With 20 to 99 employees.....do....	63	8	55	13	8	25
With 100 or more employees.....do....	35	3	35	11	4	16
All employees (average for year).....1,000..	14.6	0.8	14.1	5.3	1.5	6.2
Payroll (all employees), total for year..million dollars..	132.2	9.2	126.1	43.9	13.1	57.6
Production, development, and exploration workers:						
Average for the year.....1,000..	7.6	0.5	7.4	3.1	1.2	2.6
March.....do....	7.6	0.4	7.4	3.1	1.2	2.6
May.....do....	7.6	0.5	7.4	3.1	1.2	2.6
August.....do....	7.8	0.5	7.5	3.1	1.2	2.6
November.....do....	7.6	0.5	7.3	3.1	1.1	2.6
Man-hours, total.....millions..	15.3	1.0	14.9	6.3	2.6	5.0
Wages.....million dollars..	59.4	4.4	57.0	23.7	9.7	19.2
Supplemental labor cost not included in payroll.....do....	14.5	1.2	13.6	6.3	1.9	4.2
Legally required expenditures, including Social						
Security contributions.....do....	4.8	0.4	4.6	2.1	0.6	1.5
Payments for vountary programs.....do....	9.7	0.8	9.0	4.3	1.3	2.7
Cost of supplies, total.....do....	499.6	223.3	367.0	100.2	36.0	104.6
Supplies used, minerals received for preparation,						
and purchased machinery.....do....	224.5	95.8	171.8	50.9	21.1	42.3
Cost of resales.....do....	1.0	-	1.0	1.0	-	(Z)
Purchased fuels consumed.....do....	6.5	3.4	3.0	1.4	0.7	0.7
Electric energy:						
Purchased:						
Quantity.....million kw.-hrs..	1,853.6	205.3	1,843.1	719.6	226.4	687.5
Cost.....million dollars..	21.0	2.2	21.0	6.4	3.3	9.0
Generated less sold.....million kw.-hrs..	192.4	123.3	72.0	54.4	13.6	0.5
Contract work.....million dollars..	246.5	121.9	170.2	40.6	10.9	52.6
Value of shipments and receipts (including resales),						
total.....do....	1,094.6	193.0	998.6	368.5	150.6	277.0
Value of resales.....do....	1.0	-	1.0	1.0	-	(Z)
Value added in mining.....million dollars..	1,058.3	242.7	906.3	346.0	142.6	228.0
Capital expenditures (except land and mineral rights),						
total.....do....	463.3	272.9	274.7	77.8	28.0	55.6
Mineral development and exploration.....do....	274.2	154.8	158.7	49.1	14.2	33.4
New structures and additions.....do....	66.5	59.2	19.3	2.3	1.8	1.7
New machinery and equipment.....do....	121.8	59.0	95.9	25.9	12.1	20.3
Used plant and equipment.....do....	0.7	(Z)	0.7	0.4	(Z)	0.1
Mineral development and exploration expenditures,						
total.....do....	337.2	179.8	205.0	54.5	16.7	54.7
Capitalized.....do....	274.2	154.8	158.7	49.1	14.2	33.4
Expensed.....do....	63.0	25.0	46.2	5.4	2.6	21.3
Crude petroleum shipments by ownership...million barrels..	378.7	64.5	350.8	(NA)	(NA)	(NA)
Operator accounts:						
Royalty.....do....	31.2	6.5	29.9	6.4	6.6	11.1
Oil production payments.....do....	11.9	0.5	11.9	7.7	1.1	2.6
Net operator accounts.....do....	214.4	19.0	204.2	83.1	48.5	57.7
Accounts of others.....do....	79.8	38.5	63.9	16.7	4.0	13.4
Undistributed.....do....	40.9	-	40.9	(NA)	(NA)	(NA)
Natural gas shipments by ownership.....billion cu. ft..	595.0	70.2	(D)	(NA)	(NA)	(NA)
Operator accounts:						
Royalty.....do....	57.9	7.5	(D)	9.9	4.5	11.1
Gas production payments.....do....	23.7	0.1	(D)	3.4	1.2	2.0
Net operator accounts.....do....	337.1	35.0	(D)	115.6	50.1	39.3
Accounts of others.....do....	168.1	27.6	(D)	55.6	10.9	6.1
Undistributed.....do....	8.1	-	(D)	(NA)	(NA)	(NA)
Man-hours worked by production, development and						
exploration workers, total.....man-hours..	15.3	1.0	14.9	6.3	2.6	5.0
Operating and maintaining wells.....do....	12.7	0.7	12.5	5.6	2.3	3.7
Drilling wells and rig building.....do....	0.7	(Z)	0.7	0.2	0.1	0.3
Exploration work (except drilling wells).....do....	0.6	0.2	0.4	0.1	0.1	0.1
Other work.....do....	1.3	(Z)	1.2	0.4	(Z)	0.8

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	All types of operations	Producing operations						
		All producing operations				Oilwell operations only		
		Total	With drilling	Without drilling	Undis- tributed	Total	With drilling	Without drilling
Establishments, total.....number..	8,796	8,449	2,204	2,620	3,625	2,494	904	1,590
With 1 to 19 employees.....do....	7,762	7,430	1,564	2,485	3,381	2,287	757	1,530
With 20 to 99 employees.....do....	797	784	490	129	165	185	127	58
With 100 employees or more.....do....	237	235	150	6	79	22	20	2
All employees (average for the year).....1,000..	126.4	125.1	73.1	14.3	37.7	20.0	12.4	7.5
Payroll (all employees), total for year..million dollars..	1,049.1	1,037.4	587.1	90.9	359.4	130.5	87.1	43.4
Production, development, and exploration workers:								
Average for the year.....1,000..	66.2	65.7	49.4	10.1	6.2	14.9	9.3	5.6
March.....do....	66.4	65.9	49.1	10.7	6.1	15.4	9.3	6.1
May.....do....	65.9	65.4	49.2	10.0	6.2	14.8	9.3	5.5
August.....do....	67.6	67.1	50.7	10.1	6.2	14.9	9.4	5.5
November.....do....	64.8	64.4	48.5	9.7	6.2	14.5	9.2	5.3
Man-hours.....millions..	130.0	129.1	99.9	19.8	9.4	30.4	18.8	10.8
Wages.....million dollars..	440.3	437.2	357.5	57.3	22.4	87.3	58.3	29.0
Supplemental labor cost not included in payroll.....do....	87.2	86.0	76.0	8.7	1.3	13.7	10.0	3.8
Legally required expenditures, including Social								
Security contributions.....do....	32.3	31.8	26.0	4.6	1.0	6.8	4.4	2.4
Payments for voluntary programs.....do....	54.9	54.2	50.0	4.1	0.2	7.0	5.6	1.4
Cost of supplies, etc., total.....do....	3,308.3	3,194.6	2,980.6	167.5	46.5	497.5	420.6	77.1
Supplies used, minerals received for preparation,								
and purchased machinery.....do....	1,630.9	1,596.8	1,482.7	92.2	21.9	262.4	221.2	41.2
Cost of resales.....do....	3.0	3.0	2.7	0.1	0.2	0.2	0.2	(Z)
Purchased fuels consumed.....do....	48.6	48.0	41.3	5.3	1.4	9.8	6.8	3.0
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	8,352.3	8,346.2	7,260.1	1,007.3	78.8	2,432.9	1,737.5	695.4
Cost.....million dollars..	105.4	105.3	88.9	14.6	1.8	33.9	24.5	9.4
Generated less sold.....million kw.-hrs..	510.2	509.5	501.0	8.5	-	90.4	90.2	0.2
Contract work.....million dollars..	1,519.8	1,441.6	1,365.1	55.4	21.0	191.4	167.9	23.4
Value of shipments and receipts (including resales),								
total.....do....	11,731.7	11,731.7	10,542.4	1,037.1	151.6	1,488.7	1,069.2	419.5
Value of resales.....do....	3.0	3.0	2.8	0.1	0.1	0.3	0.2	0.1
Value added in mining.....do....	10,965.0	10,989.1	9,890.9	950.9	147.5	1,334.1	960.9	373.1
Capital expenditures (except land and mineral rights),								
total.....do....	2,541.6	2,452.2	2,329.1	80.8	42.4	343.2	312.4	30.8
Mineral development and exploration.....do....	1,372.4	1,317.7	1,266.5	26.5	24.7	170.0	158.5	11.5
New structures and additions.....do....	364.8	340.9	321.3	15.2	4.3	32.4	29.0	3.4
New machinery and equipment.....do....	759.1	749.2	708.0	30.3	11.0	130.0	117.6	12.4
Used plant and equipment.....do....	45.4	44.4	33.2	8.8	2.4	10.8	7.3	3.5
Mineral development and exploration expenditures,								
total.....do....	1,938.9	1,832.6	1,740.6	62.4	29.5	276.5	239.8	36.7
Capitalized.....do....	1,372.4	1,317.7	1,266.5	26.5	24.7	170.0	158.5	11.5
Expensed.....do....	566.5	514.9	474.1	35.9	4.9	106.6	81.4	25.2
Crude-petroleum shipments by ownership...million barrels..	3,043.7	3,043.7	2,745.9	254.7	43.1	516.5	380.3	136.2
Operator accounts:								
Royalty.....do....	342.7	342.7	312.0	30.6	0.1	56.8	39.4	17.4
Oil production payments.....do....	102.4	102.4	91.0	11.3	-	23.4	16.9	6.5
Net operator accounts.....do....	1,796.2	1,796.2	1,661.3	134.4	0.5	279.7	210.7	69.0
Accounts of others.....do....	699.9	699.9	623.1	76.4	0.5	156.6	113.3	43.3
Undistributed.....do....	102.5	102.5	58.5	2.0	42.0	-	-	-
Natural gas shipments by ownership....billion cubic feet..	17,126.1	17,126.1	15,125.5	1,846.5	154.1	293.4	187.2	106.2
Operator accounts:								
Royalty.....do....	2,003.1	2,003.1	1,779.0	221.1	3.0	26.8	16.4	10.4
Gas production payments.....do....	643.3	643.3	584.5	58.8	-	8.7	6.5	2.2
Net operator accounts.....do....	10,029.9	10,029.9	8,914.7	1,096.9	18.3	178.5	120.8	57.7
Accounts of others.....do....	3,817.2	3,817.2	3,337.2	456.1	23.9	79.2	43.3	35.9
Undistributed.....do....	632.6	632.6	510.2	13.5	108.9	0.2	0.2	-
Man-hours worked by production, development, and								
exploration workers, total.....man-hours..	130.0	129.1	99.9	19.8	9.4	29.6	18.8	10.8
Operating and maintaining wells.....do....	108.8	108.7	81.5	17.8	9.4	25.3	15.3	10.0
Drilling wells and rig building.....do....	8.6	8.6	8.2	0.3	-	2.4	2.1	0.3
Exploration work (except drilling wells).....do....	7.7	7.1	6.2	0.8	(Z)	0.8	0.6	0.2
Other work.....do....	4.8	4.8	3.9	0.8	-	1.0	0.7	0.3

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	Producing operations						Non-producing operations
	Oil and gas well operations			Gas well operations only			
	Total	With drilling	Without drilling	Total	With drilling	Without drilling	
Establishments, total.....number..	1,803	1,163	640	527	137	390	347
With 1 to 19 employees.....do....	1,278	700	578	484	107	377	332
With 20 to 99 employees.....do....	395	337	58	39	26	13	13
With 100 employees or more.....do....	10	6	4	4	4	-	2
All employees (average for the year).....1,000..	63.3	58.0	5.3	4.1	2.7	1.5	1.3
Payroll (all employees), total for year..million dollars..	518.6	480.4	38.2	28.9	19.6	9.3	11.7
Production, development, and exploration workers:							
Average for the year.....1,000..	41.9	38.3	3.6	2.7	1.7	1.0	0.5
March.....do....	41.7	38.1	3.6	2.7	1.7	1.0	0.5
May.....do....	41.6	38.1	3.5	2.8	1.8	1.0	0.5
August.....do....	43.1	39.5	3.6	2.8	1.8	1.0	0.5
November.....do....	41.1	37.6	3.5	2.6	1.6	1.0	0.5
Man-hours.....millions..	84.4	77.5	6.9	5.6	3.6	2.1	0.9
Wages.....million dollars..	309.8	287.4	22.4	17.6	11.7	5.9	3.1
Supplemental labor cost not included in payroll....do....	67.5	63.4	4.1	3.5	2.6	0.8	1.2
Legally required expenditures, including Social Security contributions.....do....	22.6	20.8	1.8	1.3	0.8	0.5	0.5
Payments for voluntary programs.....do....	44.9	42.6	2.3	2.2	1.8	0.4	0.7
Cost of supplies, etc., total.....do....	2,557.4	2,483.5	73.9	92.9	76.4	16.4	113.8
Supplies used, minerals received for preparation, and purchased machinery.....do....	1,262.2	1,221.0	41.2	50.4	40.7	9.8	34.8
Cost of resales.....do....	2.5	2.5	(Z)	(Z)	(Z)	-	-
Purchased fuels consumed.....do....	35.9	33.9	2.0	0.9	0.6	0.3	0.6
Electric energy:							
Purchased:							
Quantity.....million kw.-brs..	5,802.1	5,501.5	300.6	32.4	21.1	11.3	6.1
Cost.....million dollars..	67.8	62.9	4.9	1.7	1.5	0.2	0.1
Generated less sold.....million kw.-hrs..	416.6	408.3	8.3	2.4	2.4	-	0.7
Contract work.....million dollars..	1,189.4	1,163.6	25.8	39.9	33.7	6.2	78.3
Value of shipments and receipts (including resales), total.....do....	9,763.7	9,265.2	498.5	327.7	208.0	119.7	-
Value of resales.....do....	2.5	2.5	(Z)	(Z)	(Z)	(Z)	-
Value added in mining.....do....	9,193.6	8,733.6	460.0	314.1	196.3	117.8	24.1
Capital expenditures (except land and mineral rights), total.....do....	1,987.3	1,951.9	35.4	79.2	64.8	14.5	89.5
Mineral development and exploration.....do....	1,078.2	1,066.6	11.6	45.0	41.6	3.4	54.7
New structures and additions.....do....	293.7	287.1	6.6	10.5	5.2	5.2	23.5
New machinery and equipment.....do....	588.0	572.9	15.1	20.5	17.7	2.8	9.8
Used plant and equipment.....do....	27.8	25.6	2.2	3.3	0.2	3.0	1.0
Mineral development and exploration expenditures, total.....do....	1,445.7	1,426.2	19.5	80.5	74.3	6.2	106.3
Capitalized.....do....	1,078.2	1,066.6	11.6	45.0	41.6	3.4	54.7
Expensed.....do....	367.6	359.6	8.0	35.4	32.7	2.8	51.6
Crude-petroleum shipments by ownership...million barrels..	2,474.7	2,361.8	112.9	9.4	3.8	5.6	-
Operator accounts:							
Royalty.....do....	284.4	272.1	12.3	1.4	0.5	0.9	-
Oil production payments.....do....	78.3	73.9	4.4	0.6	0.2	0.4	-
Net operator accounts.....do....	1,511.3	1,448.3	63.0	4.7	2.3	2.4	-
Accounts of others.....do....	540.2	509.0	31.2	2.7	0.8	1.9	-
Undistributed.....do....	60.5	58.5	2.0	-	-	-	-
Natural gas shipments by ownership....billion cubic feet..	15,312.0	14,214.8	1,097.2	1,366.8	723.7	643.1	-
Operator accounts:							
Royalty.....do....	1,793.7	1,682.5	111.2	179.6	80.1	99.5	-
Gas production payments.....do....	544.7	515.0	29.7	89.9	63.0	26.9	-
Net operator accounts.....do....	8,957.6	8,332.0	625.6	875.5	461.9	413.6	-
Accounts of others.....do....	3,504.6	3,177.4	327.2	209.5	116.5	93.0	-
Undistributed.....do....	511.4	507.9	3.5	12.1	2.1	10.0	-
Man-hours worked by production, development, and exploration workers, total.....man-hours..	84.4	77.5	6.9	5.6	3.6	2.1	0.9
Operating and maintaining wells.....do....	69.6	63.7	5.9	4.4	2.5	1.9	(Z)
Drilling wells and rig building.....do....	5.6	5.6	(Z)	0.5	0.5	(Z)	0.1
Exploration work (except drilling wells).....do....	5.9	5.4	0.5	0.3	0.2	0.1	0.7
Other work.....do....	3.3	2.9	0.4	0.4	0.3	0.1	(Z)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Represents less than one-half of the unit of measure specified.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
		(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
1311	Crude petroleum and natural gas:										
	Establishments, total.....	8,796	126.4	1,049.1	66.2	130.0	440.3	10,965.0	3,308.3	11,731.7	2,541.6
	Establishments with an average of--										
	0 to 4 employees.....	5,901	7.4	40.1	6.3	10.4	27.8	705.9	415.3	804.0	317.1
	5 to 9 employees.....	1,163	7.7	46.9	5.4	10.4	28.4	459.8	188.4	523.9	124.3
	10 to 19 employees.....	698	9.5	64.1	6.2	12.2	34.1	614.8	211.0	636.2	139.7
	20 to 49 employees.....	587	18.1	135.8	11.3	22.6	71.0	1,663.0	462.8	1,683.4	412.3
	50 to 99 employees.....	210	14.8	129.1	8.3	16.6	60.9	1,289.5	355.9	1,393.5	251.9
	100 to 249 employees.....	146	22.4	208.1	9.9	20.5	75.3	2,387.8	700.3	2,562.2	525.9
	250 to 499 employees.....	63	21.7	196.7	9.9	19.9	74.2	2,377.5	536.4	2,502.4	411.4
	500 to 999 employees.....	20	24.7	228.0	8.8	17.2	68.7	1,495.9	437.9	1,575.0	359.0
	1,000 to 2,499 employees.....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	2,601	2.8	11.7	2.8	3.3	8.8	58.5	20.2	64.0	14.6
	Crude petroleum subindustry:										
	Establishments, total.....	7,278	106.8	901.7	54.9	107.7	365.6	8,943.0	2,771.8	9,648.7	2,066.1
	Establishments with an average of--										
	0 to 4 employees.....	4,849	6.2	33.0	4.5	9.4	23.0	526.3	320.7	601.4	245.6
	5 to 9 employees.....	980	6.5	38.9	4.6	8.8	23.4	326.9	149.9	381.7	95.1
	10 to 19 employees.....	593	8.1	54.2	5.4	10.4	28.9	458.6	174.7	517.6	115.7
	20 to 49 employees.....	488	14.9	110.3	9.2	18.3	55.9	1,149.4	338.5	1,211.1	276.8
	50 to 99 employees.....	162	11.4	102.4	6.3	12.8	47.1	855.4	262.2	955.0	162.7
	100 to 249 employees.....	126	19.2	182.9	8.1	16.9	62.7	2,078.4	609.7	223.7	451.0
	250 to 499 employees.....	57	19.9	182.3	8.6	17.4	65.0	2,134.8	494.1	2,251.7	377.2
	500 to 999 employees.....	16	20.5	197.7	7.4	14.5	59.8	1,413.2	422.0	1,493.3	341.9
	1,000 to 2,499 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	2,220	2.4	10.2	2.4	2.9	7.7	52.7	19.2	58.0	13.8
	Natural gas subindustry:										
	Establishments, total.....	1,518	19.6	147.4	11.2	22.3	74.7	2,022.1	536.5	2,082.9	475.6
	Establishments with an average of--										
	0 to 4 employees.....	1,052	1.2	7.0	1.0	1.8	4.8	179.5	94.6	202.7	71.5
	5 to 9 employees.....	183	1.2	8.0	0.8	1.7	4.9	132.8	38.5	142.2	29.2
	10 to 19 employees.....	105	1.4	9.9	0.8	1.8	5.1	156.3	36.3	168.6	24.0
	20 to 49 employees.....	99	3.2	25.5	2.1	4.3	15.1	484.7	124.6	473.6	135.7
	50 to 99 employees.....	48	3.4	26.6	2.0	3.9	13.8	434.0	93.7	438.6	89.2
	100 to 249 employees.....	20	3.3	25.2	1.8	3.6	12.6	309.4	90.5	325.0	74.9
	250 to 499 employees.....	6	1.8	14.4	1.2	2.5	9.3	242.7	42.3	250.7	34.2
	500 to 999 employees.....	4	4.1	30.8	1.4	2.7	8.9	82.7	15.9	81.7	17.1
	1,000 to 2,499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	381	0.4	1.5	0.4	0.4	1.1	5.8	1.0	6.0	0.8

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. - Represents zero. (X) Not applicable. (NA) Not available.

(Z) Under 50 thousand (or under 50 employees.)

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	UNITED STATES					
1311- --	Crude petroleum and natural gas, total.....		(X)	11,740.2	(X)	9,882.5
13111	Crude petroleum including lease condensate.....	Million barrels..	3,064.8	(X)	2,703.5	(X)
13111 03	Shipped.....	..do.....	3,057.4	8,841.7	2,702.0	7,713.7
13111 41	Lease condensate.....	..do.....	165.4	(X)	(X)	(X)
13111 06	Used in lease operations.....	..do.....	7.4	(X)	1.5	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	19,308.9	(X)	15,870.3	(X)
13112 11	From oil wells ¹.....	..do.....	6,110.7	(X)	4,468.3	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	13,198.2	(X)	11,402.0	(X)
13112 2-	Shipped, total.....	..do.....	17,185.1	2,898.5	13,765.0	2,168.7
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	..do.....	15,952.8	2,667.4	12,912.8	2,015.7
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	..do.....	1,232.4	231.1	852.2	153.1
13112 31	Used in lease operations.....	..do.....	640.5	(X)	548.1	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	1,206.6	(X)	1,309.4	(X)
13112 33	Net change in underground storage.....	..do.....	2.5	(X)	5.2	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	274.3	(X)	243.7	(X)
	Middle Atlantic Division					
1311- --	Crude petroleum, and natural gas, total.....		(X)	51.7	(X)	55.9
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	5.6	25.2	6.8	29.3
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	78.8	(X)	96.6	(X)
	From oil wells ¹.....	..do.....	2.9	(X)	5.7	(X)
	From gas or gas condensate wells ¹.....	..do.....	75.9	(X)	90.9	(X)
13112 2-	Shipped, total.....	..do.....	77.6	26.5	90.3	26.5
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	..do.....	52.5	16.4	60.6	16.5
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	..do.....	25.1	10.1	29.7	10.0
	New York					
1311- --	Crude petroleum and natural gas, total.....		(X)	8.9	(X)	9.0
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	1.7	7.6	2.0	7.9
13112	Natural gas shipped.....	Billion cu. ft...	3.0	1.3	3.4	1.1
	Pennsylvania					
1311- --	Crude petroleum and natural gas, total.....		(X)	42.8	(X)	46.9
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	3.9	17.6	4.8	21.4
13112 2-	Natural gas shipped.....	Billion cu. ft...	74.6	25.2	87.3	25.5
	East North Central Division					
1311- --	Crude petroleum and natural gas, total.....		(X)	246.7	(X)	328.6
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	77.2	233.1	106.8	311.9
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	55.5	(X)	76.5	(X)
13112 11	From oil wells ¹.....	..do.....	22.3	(X)	28.0	(X)
13112 12	From gas or gas condensate wells ¹.....	..do.....	33.2	(X)	48.5	(X)
13112 2-	Shipped, total.....	..do.....	51.1	13.6	70.2	16.7
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	..do.....	48.9	12.8	52.1	11.9
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	..do.....	2.2	0.9	18.0	4.8
13112 31	Used in lease operations.....	..do.....	3.6	(X)	4.5	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	East North Central Division--Continued					
	Illinois					
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	54.9	166.1	372.3	214.5
	Michigan					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	37.7	(X)	55.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	10.4	30.3	316.6	47.5
13112 2-	Natural gas shipped.....	Billion cu. ft...	27.1	7.4	30.3	8.0
	West North Central Division					
1311- --	Crude petroleum and natural gas.....	.....	(X)	461.8	(X)	525.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	119.6	341.5	151.5	425.2
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	930.9	(X)	777.6	(X)
13112 11	From oil wells ¹.....	...do.....	136.2	(X)	67.9	(X)
13112 12	From gas or gas condensate wells ¹.....	...do.....	794.7	(X)	709.7	(X)
13112 2-	Shipped, total.....	...do.....	915.9	120.3	761.0	100.2
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	893.1	117.7	707.5	92.2
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	Billion cu. ft...	22.8	2.7	53.5	8.0
13112 31	Used in lease operations.....	...do.....	6.0	(X)	6.1	(X)
	Kansas					
1311- --	Crude petroleum and natural gas, total....	.....	(X)	368.9	(X)	401.5
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	86.3	252.3	108.3	305.2
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	885.0	(X)	735.7	(X)
13112 11	From oil wells ¹.....	...do.....	94.4	(X)	32.6	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	790.6	(X)	703.1	(X)
13112 2-	Shipped.....	...do.....	875.0	116.5	722.4	96.3
13112 31	Used in lease operations.....	...do.....	4.5	(X)	3.9	(X)
	South Atlantic Division					
1311- --	Crude petroleum and natural gas.....	.....	(X)	76.2	(X)	60.9
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels..	5.1	17.5	3.7	12.7
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	181.1	(X)	192.6	(X)
13112 11	From oil wells ¹.....	...do.....	10.5	(X)	9.5	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	170.6	(X)	183.1	(X)
13112 2-	Shipped, total.....	...do.....	175.9	58.8	185.6	48.2
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	138.3	40.8	155.2	39.1
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	37.6	18.0	30.3	9.1
13112 31	Used in lease operations.....	...do.....	2.5	(X)	(NA)	(X)
	East South Central Division					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	235.8	(X)	285.4
13111 03	Crude petroleum, including lease condensate shipped.....	Million barrels..	69.8	191.6	87.3	240.0
13112 --	Natural gas production and disposition, total.....	Billion cu. ft...	237.2	(X)	290.0	(X)
13112 11	From oil wells ¹.....	...do.....	58.3	(X)	93.1	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	179.0	(X)	196.8	(X)
13112 2-	Shipped, total.....	...do.....	197.4	44.2	236.0	45.4
13112 21	Delivered to distributors and transmission companies, and net delivered to natural gas liquids plants ².....	...do.....	187.9	41.7	225.6	43.4
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	9.5	2.5	10.4	2.0
13112 31	Used in lease operations.....	...do.....	8.8	(X)	44.6	(X)
13112 32	Returned to underground formations.....	...do.....	23.8	(X)		(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	5.4	(X)		(NA)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	East South Central Division--Continued					
	Kentucky					
1311- --	Crude petroleum and natural gas, total.....		(X)	53.9	(X)	69.0
13111 03	Crude petroleum, including lease condensate.....	Million barrels.	12.2	34.9	³ 18.9	54.5
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	66.7	(X)	71.0	(X)
13112 11	From oil wells ¹.....	...do.....	0.6	(X)	0.7	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	66.1	(X)	70.3	(X)
13112 2-	Shipped.....	...do.....	64.4	19.0	68.1	14.5
	Mississippi					
1311- --	Crude petroleum and natural gas, total.....		(X)	161.7	(X)	193.7
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	50.3	136.4	³ 59.7	162.8
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	170.3	(X)	217.7	(X)
13112 11	From oil wells ¹.....	...do.....	50.0	(X)	91.9	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	120.3	(X)	125.8	(X)
13112 2-	Shipped.....	...do.....	133.0	25.2	167.9	30.9
13112 31	Used in lease operations.....	...do.....	8.8	(X)	43.3	(X)
13112 32	Returned to underground formations.....	...do.....	23.8	(X)		
	West South Central Division					
1311- --	Crude petroleum and natural gas, total.....		(X)	8,441.2	(X)	6,581.8
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	2,047.2	(X)	1,682.9	(X)
13111 03	Shipped.....	...do.....	2,044.2	6,179.0	1,682.1	4,979.8
13111 41	Lease condensate.....	...do.....	163.7	(X)	(X)	(X)
13111 06	Used in lease operations.....	...do.....	3.0	(X)	0.8	(X)
13112 --	Natural gas production, and disposition, total.....	Billion cu. ft..	15,475.8	(X)	12,308.4	(X)
13112 11	From oil wells ¹.....	...do.....	4,771.8	(X)	3,206.9	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	10,704.0	(X)	9,101.4	(X)
13112 2-	Shipped, total.....	...do.....	13,819.3	2,262.2	10,713.1	1,602.0
13112 21	Delivered to distributors and transmission companies and not delivered to natural gas liquids plants ².....	...do.....	12,813.8	2,095.6	10,104.1	1,509.4
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	1,005.5	166.6	609.1	92.6
13112 31	Uses in lease operations.....	...do.....	500.1	(X)	401.9	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and recycling.....	...do.....	953.6	(X)	1,004.1	(X)
13112 33	Net change in underground storage.....	...do.....	-0.5	(X)	1.5	(X)
13112 34	Vented to air, burned in flares, or other losses.....	...do.....	203.3	(X)	188.0	(X)
	West South Central Division, Offshore					
1311- --	Crude petroleum and natural gas, total.....		(X)	1,182.6	(X)	(NA)
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	277.8	854.5	⁴ 143.8	(NA)
13111 41	Lease condensate.....	...do.....	20.7	(X)	(X)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	1,834.5	(X)	⁵ 711.7	(X)
13112 11	From oil wells ¹.....	...do.....	332.2	(X)	⁵ 253.1	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	1,502.3	(X)	⁵ 458.6	(X)
13112 2-	Shipped.....	...do.....	1,673.5	328.1	⁴ 657.6	(NA)
13112 31	Used in lease operations.....	...do.....	27.5	(X)	(NA)	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	50.2	(X)	(NA)	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	83.4	(X)	(NA)	(X)
	Arkansas					
1311- --	Crude petroleum and natural gas, total.....		(X)	69.8	(X)	67.6
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	16.6	45.1	20.7	53.9
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	142.8	(X)	88.7	(X)
13112 11	From oil wells ¹.....	...do.....	51.2	(X)	46.8	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	91.6	(X)	41.9	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	West South Central Division, Offshore--Continued					
	Arkansas--Continued					
	Natural gas production and disposition--Continued					
13112 2-	Shipped.....	Billion cu. ft..	129.7	24.6	65.0	13.6
13112 31	Used in lease operations.....	..do.....	8.4	(X)		
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	3.4	(X)	21.0	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	1.3	(X)	(NA)	(X)
	Louisiana					
1311- --	Crude petroleum and natural gas, total.....		(X)	3,364.6	(X)	2,238.9
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	748.9	(X)	503.5	(X)
13111 03	Shipped.....	..do.....	748.1	2,311.7	503.5	1,546.7
13111 41	Lease condensate.....	..do.....	80.3	(X)	(X)	(X)
13111 06	Used in lease operations.....	..do.....	0.9	(X)	(Z)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	5,885.9	(X)	4,097.4	(X)
13112 11	From oil wells ¹.....	..do.....	1,239.2	(X)	919.1	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	4,646.7	(X)	3,178.2	(X)
13112 2-	Shipped, total.....	..do.....	5,471.0	1,052.9	3,675.3	692.1
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	..do.....	5,391.9	1,037.4	3,542.2	668.4
13112 22	Delivered to consumers (domestic, commercial, industrial, including own refineries).....	..do.....	79.1	15.5	133.1	23.7
13112 31	Used in lease operations.....	..do.....	168.1	(X)	130.4	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	118.6	(X)	214.6	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	128.3	(X)	(NA)	(X)
	North Louisiana					
1311- --	Crude petroleum and natural gas, total.....		(X)	211.4	(X)	229.5
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	44.3	130.4	³ 53.6	157.2
12111 41	Lease condensate.....	..do.....	3.5	(X)	(X)	(X)
13112 --	Natural gas production and disposition.....	Billion cu. ft..	667.4	(X)	577.4	(X)
13112 11	From oil wells ¹.....	..do.....	131.9	(X)	102.4	(X)
13112 12	From gas or gas condensate wells ¹.....	..do.....	535.5	(X)	475.0	(X)
13112 2-	Shipped, total.....	..do.....	512.7	81.1	479.9	72.3
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	..do.....	488.7	77.3	432.9	65.0
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	..do.....	24.0	3.8	46.9	7.3
13112 31	Used in lease operations.....	..do.....	18.4	(X)	21.8	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	28.6	(X)	69.5	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	4.0	(X)	(NA)	(X)
	South and Offshore Louisiana					
1311- --	Crude petroleum and natural gas, total.....		(X)	3,152.6	(X)	2,009.4
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	704.5	(X)	449.9	(X)
13111 03	Shipped.....	..do.....	703.7	2,181.2	³ 449.9	1,389.5
13111 41	Lease condensate.....	..do.....	76.8	(X)	(X)	(X)
13111 06	Used in lease operations.....	..do.....	0.8	(X)	(Z)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	5,218.5	(X)	3,519.9	(X)
13112 11	From oil wells ¹.....	..do.....	1,107.3	(X)	816.7	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	4,111.2	(X)	2,703.2	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	South and Offshore Louisiana--Continued					
	Natural gas production and disposition, total--Continued					
13112 2-	Shipped, total.....	Billion cu. ft..	4,958.3	971.8	3,195.5	619.8
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	4,903.2	960.1	3,109.3	603.4
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	55.1	11.7	86.2	16.4
13112 31	Used in lease operations.....	...do.....	149.7	(X)	108.6	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	90.0	(X)	145.1	(X)
13112 33	Net change in underground storage.....	...do.....	-0.1	(X)	70.0	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	124.2	(X)		
	Oklahoma					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	823.5	(X)	707.2
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	211.2	(X)	199.8	(X)
13111 03	Shipped.....	...do.....	210.3	623.0	199.6	559.9
13111 41	Lease condensate.....	...do.....	17.9	(X)	(X)	(X)
13111 06	Used in lease operations.....	...do.....	0.9	(X)	0.2	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	1,501.4	(X)	1,206.2	(X)
13112 11	From oil wells ¹.....	...do.....	506.0	(X)	433.7	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	995.3	(X)	772.5	(X)
13112 2-	Shipped.....	...do.....	1,399.7	200.6	1,112.1	147.2
13112 31	Used in lease operations.....	...do.....	37.8	(X)	85.5	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	60.1	(X)		
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	3.7	(X)	(NA)	(X)
	Texas					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	4,184.2	(X)	3,568.2
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	1,070.4	(X)	958.9	(X)
13111 03	Shipped.....	...do.....	1,069.1	3,200.2	958.4	^x 2,819.2
13111 41	Lease condensate.....	...do.....	64.7	(X)	(X)	(X)
13111 06	Used in lease operations.....	...do.....	1.3	(X)	0.5	(X)
13112 --	Natural gas production, and disposition, total.....	Billion cu. ft..	7,945.7	(X)	6,916.1	(X)
13112 11	From oil wells ¹.....	...do.....	2,975.4	(X)	1,807.4	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	4,970.3	(X)	5,108.7	(X)
13112 2-	Shipped, total.....	...do.....	6,818.9	984.0	5,860.9	749.0
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	5,957.4	847.3	5,429.2	690.1
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	861.5	136.7	431.7	58.8
13112 31	Used in lease operations.....	Billion cu. ft..	285.7	(X)	235.7	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	771.5	(X)	718.0	(X)
13112 33	Net change in underground storage.....	...do.....	-0.4	(X)	0.8	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	70.1	(X)	100.5	(X)
	Texas Gulf Coast A and Offshore Texas					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	693.9	(X)	606.9
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	145.9	460.0	³ 143.0	442.1
13111 41	Lease condensate.....	...do.....	12.1	(X)	(X)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	Texas Gulf Coast A and Offshore Texas--Continued					
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	1,831.6	(X)	1,407.7	(X)
13112 11	From oil wells ¹.....	...do.....	735.2	(X)	328.7	(X)
13112 12	From gas or gas condensate wells ¹.....	...do.....	1,096.4	(X)	1,078.8	(X)
13112 2-	Shipped, total.....	...do.....	1,433.2	234.0	1,031.7	164.8
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	1,221.9	198.3	924.9	150.5
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	211.3	35.6	106.8	14.3
13112 31	Used in lease operations.....	...do.....	94.9	(X)	73.7	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	283.9	(X)	277.7	(X)
13112 33	Net change in underground storage.....	...do.....	-0.4	(X)	0.1	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	20.0	(X)	24.2	(X)
	Texas Gulf Coast B					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	284.6	(X)	248.9
13111 05	Crude petroleum, including lease condensate, shipped.....	Million barrels.	61.2	190.5	³ 48.3	147.2
13111 41	Lease condensate.....	...do.....	4.8	(X)	(X)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	726.0	(X)	838.0	(X)
13112 11	From oil wells ¹.....	...do.....	229.7	(X)	148.8	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	496.3	(X)	689.2	(X)
13112 2-	Shipped, total.....	...do.....	644.3	94.1	755.7	101.7
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	605.1	87.0	718.4	95.8
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	39.2	7.1	37.3	5.9
13112 31	Used in lease operations.....	...do.....	34.5	(X)	31.3	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	40.6	(X)	37.1	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	6.6	(X)	13.3	(X)
	South Texas					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	511.8	(X)	360.5
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	97.8	(X)	74.3	(X)
13111 03	Shipped.....	...do.....	97.6	305.3	74.2	226.2
13111 41	Lease condensate.....	...do.....	14.9	(X)	(NA)	(X)
13111 06	Used in lease operations.....	...do.....	0.2	(X)	0.1	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	1,714.3	(X)	1,385.9	(X)
13112 11	From oil wells ¹.....	...do.....	496.9	(X)	247.9	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	1,217.4	(X)	1,138.0	(X)
13112 2-	Shipped, total.....	...do.....	1,324.5	206.5	1,043.6	134.3
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	1,068.8	166.7	972.9	123.4
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	255.7	39.8	70.7	11.0
13112 31	Used in lease operations.....	...do.....	57.2	(X)	39.5	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	318.3	(X)	278.3	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	14.3	(X)	24.5	(X)
	Southwest Texas					
1311- --	Crude petroleum and natural gas.....	.....	(X)	68.1	(X)	72.1
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	17.2	47.9	³ 19.4	55.6
13112 2-	Natural gas shipped.....	Billion cu. ft..	136.0	20.2	121.3	16.4

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	North Central Texas A					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	182.3	(X)	200.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	54.9	162.4	62.9	185.0
13111 41	Lease condensate.....	...do.....	1.3	(X)	(NA)	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	130.0	20.0	119.1	15.4
	North Central Texas B					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	103.3	(X)	128.6
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	31.4	96.0	40.9	119.2
13111 41	Lease condensate.....	...do.....	1.4	(X)	(NA)	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	63.5	7.2	85.3	9.4
	East Texas A					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	89.4	(X)	93.2
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	21.8	64.1	³ 28.8	53.1
13111 41	Lease condensate.....	...do.....	2.4	(X)	(NA)	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	162.7	25.3	73.6	10.1
	East Texas B					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	382.2	(X)	320.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	101.8	298.5	83.5	241.9
13111 41	Lease condensate.....	...do.....	4.5	(X)	(NA)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	620.3	(X)	608.1	(X)
13112 11	From oil wells ¹.....	...do.....	160.8	(X)	61.5	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	459.5	(X)	546.7	(X)
13112 2-	Shipped.....	...do.....	582.9	83.7	578.2	78.5
13112 31	Used in lease operations.....	...do.....	12.5	(X)	10.7	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	22.1	(X)	11.1	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	2.8	(X)	8.0	(X)
	West Texas A					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	1,459.6	(X)	1,202.3
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	455.6	1,334.2	384.0	1,108.9
13111 41	Lease condensate.....	...do.....	20.0	(X)	(NA)	(X)
13112 --	Natural gas production and disposition.....	Billion cu. ft..	1,267.4	(X)	1,165.3	(X)
13112 11	From oil wells ¹.....	...do.....	845.9	(X)	623.8	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	421.5	(X)	541.5	(X)
13112 2-	Shipped.....	...do.....	1,130.3	125.5	1,013.8	93.3
13112 31	Used in lease operations.....	...do.....	56.8	(X)	56.3	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	69.2	(X)	76.9	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	11.1	(X)	18.2	(X)
	West Texas B					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	185.8	(X)	118.4
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	53.4	(X)	36.6	(X)
13111 03	Shipped.....	...do.....	52.6	155.1	36.5	103.6
13111 41	Lease condensate.....	...do.....	1.2	(X)	(NA)	(X)
13111 06	Used in lease operations.....	...do.....	0.8	(X)	0.1	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	244.2	30.8	151.2	14.9

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
Texas Panhandle						
1311- --	Crude petroleum and natural gas, total.....		(X)	223.5	(X)	216.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	29.1	86.3	³ 36.9	106.4
13111 41	Lease condensate.....	..do.....	1.0	(X)	(NA)	(X)
13112 --	Natural gas, production and disposition, total.....	Billion cu. ft..	982.7	(X)	911.3	(X)
13112 11	From oil wells ¹.....	..do.....	137.8	(X)	116.3	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	844.9	(X)	795.0	(X)
13112 2-	Shipped.....	..do.....	967.2	137.2	887.4	110.0
13112 31	Used in lease operations.....	..do.....	9.7	(X)	6.1	(X)
13112 32	Returned to underground formations for repressing, pressure maintenance, and cycling.....	..do.....	3.4	(X)	13.9	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	2.4	(X)	4.0	(X)
Mountain Division						
1311- --	Crude petroleum and natural gas, total.....		(X)	1,139.3	(X)	1,059.3
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	356.9	(X)	344.4	(X)
13111 03	Shipped.....	..do.....	356.8	962.0	344.2	918.9
13111 41	Lease condensate.....	..do.....	6.8	(X)	(NA)	(X)
13111 06	Used in lease operations.....	..do.....	0.1	(X)	0.2	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	1,457.5	(X)	1,261.1	(X)
13112 11	From oil wells ¹.....	..do.....	495.3	(X)	507.0	(X)
13112 12	From gas or gas condensate wells ¹.....	..do.....	962.2	(X)	754.1	(X)
13112 2-	Shipped, total.....	..do.....	1,352.8	177.3	1,132.5	140.4
13112 21	Delivered to distributors and transmission companies and not delivered to natural gas liquids plants ².....	..do.....	1,328.4	174.9	1,102.6	137.5
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	..do.....	24.4	2.4	29.9	2.9
13112 31	Used in lease operations.....	..do.....	37.8	(X)	44.0	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	49.5	(X)	69.3	(X)
13112 33	Net change in underground storage.....	..do.....	0.7	(X)	0.4	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	16.8	(X)	15.0	(X)
Montana						
1311- --	Crude petroleum and natural gas, total.....		(X)	82.5	(X)	74.0
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	31.6	80.5	29.4	72.2
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	32.0	(X)	25.4	(X)
13112 11	From oil wells ¹.....	..do.....	13.0	(X)	25.4	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	19.0	(X)		
13112 2-	Shipped.....	..do.....	24.9	2.1	21.5	1.8
13112 31	Used in lease operations.....	..do.....	5.5	(X)	2.9	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	1.6	(X)	(NA)	(X)
Wyoming						
1311- --	Crude petroleum and natural gas, total.....		(X)	402.4	(X)	364.0
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	142.0	370.5	133.5	334.9
13111 41	Lease condensate.....	..do.....	1.1	(X)	(NA)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	249.6	(X)	229.5	(X)
13112 11	From oil wells ¹.....	..do.....	74.0	(X)	71.9	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	175.6	(X)	157.6	(X)
13112 2-	Shipped.....	..do.....	221.0	31.9	200.6	29.1
13112 31	Used in lease operations.....	..do.....	10.0	(X)	12.2	(X)
13112 32	Returned to underground formations for repressing, pressure maintenance, and cycling.....	..do.....	14.6	(X)	13.2	(X)
13112 34	Vented to air, burned in flares, and other losses.....	..do.....	4.1	(X)	(NA)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product Code	Product and geographic area	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	Colorado					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	105.3	(X)	119.7
13111 03	Crude petroleum, including lease condensate, total.....	...do.....	32.4	93.1	38.2	109.3
13112 2-	Natural gas shipped.....	Billion cu. ft..	91.7	12.2	84.5	10.3
	New Mexico					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	470.5	(X)	401.6
13111 03	Crude petroleum, including lease condensate, shipped.....	Million cu. ft..	123.6	346.4	109.8	313.5
13111 41	Lease condensate.....	...do.....	5.3	(X)	(NA)	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	990.7	(X)	778.6	(X)
13112 11	From oil wells ¹.....	...do.....	307.5	(X)	281.8	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	683.1	(X)	496.8	(X)
13112 2-	Shipped.....	...do.....	971.3	124.0	754.6	88.1
13112 31	Used in lease operations.....	...do.....	11.2	(X)	16.2	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	6.2	(X)	(NA)	(X)
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	2.0	(X)	(NA)	(X)
	East New Mexico					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	379.4	(X)	325.4
13111 03	Crude petroleum, including lease condensate, shipped.....	Million cu. ft..	113.1	320.3		
13111 41	Lease condensate.....	...do.....	2.1	(X)	(NA)	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	481.5	59.0	388.8	41.9
	West New Mexico					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	91.1	(X)	76.3
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	10.5	26.1	11.4	30.1
13111 41	Lease condensate.....	...do.....	3.2	(X)	(NA)	(X)
13112 2-	Natural gas shipped.....	Billion cu. ft..	489.8	65.0	365.8	46.2
	Pacific Division					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	1,087.5	(X)	985.2
13111 --	Crude petroleum, including lease condensate.....	Million barrels.	383.2	(X)	320.0	(X)
13111 03	Shipped.....	...do.....	379.0	891.9	319.6	795.9
13111 41	Lease condensate.....	...do.....	1.3	(X)	(NA)	(X)
13111 06	Used in lease operations.....	...do.....	4.2	(X)	0.4	(X)
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	892.1	(X)	875.4	(X)
13112 11	From oil wells ¹.....	...do.....	613.4	(X)	551.3	(X)
13112 12	From gas and gas condensate wells ¹.....	...do.....	278.7	(X)	324.1	(X)
13112 2-	Shipped, total.....	...do.....	595.1	195.6	576.3	189.3
13112 21	Delivered to distributors and transmission companies and net delivered to natural gas liquids plants ².....	...do.....	489.9	167.6	505.1	165.7
13112 22	Delivered to consumers (domestic, commercial, and industrial, including own refineries).....	...do.....	105.2	28.0	71.2	23.7
13112 31	Used in lease operations.....	...do.....	79.2	(X)	74.6	(X)
13112 32	Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	178.0	(X)	201.1	(X)
13112 33	Net change in underground storage.....	...do.....	0.1	(X)		
13112 34	Vented to air, burned in flares, and other losses.....	...do.....	39.8	(X)	23.4	(X)
	Pacific Division, Offshore ⁶					
1311- --	Crude petroleum and natural gas, total.....	.....	(X)	190.8	(X)	(NA)
13111 03	Crude petroleum, including lease condensate, shipped.....	Million barrels.	64.5	162.8	⁵ 30.8	(NA)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	Unit of measure	1967		1963	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
	Pacific Division, Offshore--Continued					
13112 --	Natural gas production and disposition, total.....	Billion cu. ft..	88.0	(X)	51.6	(X)
13112 11	From oil wells ¹.....	..do.....	43.6	(X)	24.1	(X)
13112 12	From gas and gas condensate wells ¹.....	..do.....	44.4	(X)	27.5	(X)
13112 2-	Shipped.....	..do.....	70.2	28.0	⁴ 45.2	(NA)
13112 31	Used in lease operations.....	..do.....	6.6	(X)	(NA)	(X)
13112 34	Vented to air, used in flares, and other losses.....	..do.....	11.1	(X)	(NA)	(X)

Note: Detailed figures may not add to totals due to independent rounding. See Appendix Explanation of Terms, for discussion of items.

Standard notes: (NA) Not available. (X) Not applicable.

¹In 1967, respondents operating wells which produced hydrocarbons initially existing in the reservoir in both liquid and gaseous phases were requested to classify them as oil wells. In 1963, respondents were requested to classify producing wells according to the largest value of either oil or gas produced and to classify condensate wells, primarily valued for their oil and condensate as oil wells. Consequently, gas production quantities by well type are not comparable in 1967 and 1963.

²Respondents were requested to include, besides the value of residue gas, the producer's realization from all products contained in the gas delivered to natural gas liquids plants.

³Includes a small quantity of crude petroleum used in lease operations amounting to less than 0.1 percent of the quantity shown.

⁴Figures from table 6D of the 1963 Census of Mineral Industries, Volume I.

⁵Figures from table 6F of the 1963 Census of Mineral Industries, Volume I.

⁶Figures for 1967 include Cook Inlet, Alaska as offshore operations.

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967

[Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries]

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							Cost of lease equipment beyond the Christmas tree (million dollars)
				All costs			Cost, excluding lease equipment beyond the Christmas tree				
		Total (1,000 feet)	Per well (feet)	Total (million dollars)	Per well (\$1,000)	Per foot (dollars)	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors (million dollars)	Cost of casing, tubing, and well equipment (million dollars)	All other costs of drilling and equipping (million dollars)	
United States, Total.....	21,620	108,751	5,030	2,047.8	94.7	18.83	694.8	224.3	407.4	579.3	142.2
Oil wells.....	11,033	48,870	4,429	958.0	86.8	19.60	268.3	99.2	226.3	255.8	108.2
Gas and gas condensate well.....	2,678	18,199	6,796	469.9	175.5	25.82	146.6	45.4	111.7	139.9	26.4
Dry holes.....	6,867	38,875	5,661	582.0	84.8	14.97	269.3	76.2	61.1	174.0	1.5
Service wells.....	1,042	2,807	2,694	38.0	36.5	13.54	10.4	3.5	8.3	9.6	6.1
Multiple completions, total.....	1,745	12,460	7,140	357.6	204.9	28.70	94.8	29.2	80.2	126.0	27.4
Oil wells.....	1,339	9,150	6,833	248.6	185.7	27.17	65.8	19.4	54.4	89.7	19.3
Gas and gas condensate wells.....	406	3,310	8,153	109.0	268.5	32.93	29.0	9.8	25.8	36.3	8.1
Offshore, United States, Total.....	1,379	12,828	9,302	667.4	484.0	52.03	212.3	64.2	121.3	226.1	43.5
Oil wells.....	731	6,189	8,466	351.2	480.4	56.75	89.9	30.9	74.7	121.5	34.2
Gas and gas condensate wells.....	181	2,057	11,365	110.4	609.9	53.67	31.7	8.9	24.0	37.7	8.1
Dry holes.....	426	4,327	10,157	196.6	461.5	45.44	88.6	23.9	20.8	63.0	0.3
Service wells.....	39	255	6,538	9.2	235.9	36.08	2.1	0.5	1.8	3.9	0.9
Multiple completions, total.....	372	3,944	10,602	200.0	53.8	50.71	51.5	14.6	39.4	80.0	14.5
Oil wells.....	293	3,029	10,337	148.3	50.6	48.96	38.6	10.0	27.7	62.0	10.0
Gas and gas condensate wells.....	79	915	11,582	51.7	65.4	56.49	12.9	4.6	11.7	18.0	4.5
Middle Atlantic Division, Total.....	558	1,294	2,319	10.3	18.5	7.96	4.8	1.4	2.1	1.5	0.5
Oil wells.....	279	406	1,455	2.3	8.2	5.67	0.8	0.3	0.7	0.2	0.3
Gas and gas condensate wells.....	181	672	3,713	6.5	35.9	9.67	3.0	0.9	1.3	1.1	0.2
Multiple completions, total.....	41	119	2,902	0.9	22.0	7.56	0.1	0.1	0.2	0.5	0.1
New York, Total.....	100	154	1,540	0.9	9.0	5.84	0.2	(Z)	0.3	(Z)	(Z)
Oil wells.....	75	111	1,480	0.6	8.0	5.41	0.1	(Z)	0.3	(Z)	(Z)
Pennsylvania, Total.....	450	1,130	2,511	9.5	21.1	8.40	4.4	1.4	1.8	1.4	0.5
Oil wells.....	204	295	1,446	1.6	7.8	5.42	0.5	0.3	0.4	0.2	0.2
Multiple completions, total.....	41	119	2,902	0.9	22.0	7.56	0.1	0.1	0.2	0.5	0.1
East North Central Division, Total.....	1,659	5,005	3,017	38.8	23.4	7.75	14.2	3.2	8.3	7.2	5.9
Oil wells.....	875	2,754	3,147	21.7	24.8	7.88	6.8	2.2	6.2	4.3	2.2
Gas and gas condensate wells.....	118	463	3,924	4.1	34.7	8.86	1.6	0.3	1.2	0.7	0.3
Dry holes.....	530	1,520	2,868	7.6	14.3	5.00	5.2	0.4	0.3	1.7	(Z)
Service wells.....	136	268	1,971	5.4	39.9	20.24	0.5	0.3	0.6	0.5	3.4
Illinois, Total.....	728	1,949	2,677	32.6	44.8	16.73	9.3	4.3	7.5	3.1	8.4
Oil wells.....	401	1,138	2,838	24.5	61.1	21.53	7.2	3.8	6.7	1.8	5.0
Dry holes.....	213	580	2,723	3.1	14.6	5.34	1.8	0.3	0.2	0.8	(Z)
Multiple completions, total.....	75	123	1,640	1.3	17.5	10.69	0.5	0.1	0.3	0.2	0.2
Oil wells.....	75	123	1,640	1.3	17.5	10.69	0.5	0.1	0.3	0.2	0.2
West North Central Division, Total.....	2,263	9,297	3,666	55.2	24.4	6.65	21.5	5.6	10.9	11.8	5.5
Oil wells.....	892	3,170	3,553	31.0	34.8	9.78	8.3	2.7	8.8	6.2	5.0
Gas and gas condensate wells.....	106	431	4,066	3.6	34.0	8.35	1.2	0.4	0.8	0.9	0.3
Dry holes.....	1,150	4,465	3,883	18.8	16.3	4.21	11.3	2.3	0.8	4.3	0.1
Service wells.....	115	231	2,009	1.8	15.6	7.75	0.7	0.2	0.4	0.4	0.1
Multiple completions, total.....	122	438	3,590	3.2	26.2	7.31	1.0	0.3	0.9	0.6	0.4
Oil wells.....	101	352	3,485	2.5	25.4	7.10	0.9	0.2	0.7	0.4	0.3
Gas and gas condensate wells.....	21	86	4,095	0.7	31.7	7.74	0.1	0.1	0.2	0.2	0.1
Kansas, Total.....	2,070	7,263	3,509	42.5	20.5	5.85	16.1	4.7	8.9	8.9	3.9
Oil wells.....	817	2,643	3,235	22.7	27.8	8.59	5.7	2.2	7.0	4.3	3.5
Gas and gas condensate wells.....	91	374	4,110	3.4	37.4	9.09	1.0	0.4	0.8	0.9	0.3
Dry holes.....	1,053	4,040	3,837	15.1	14.3	3.74	9.0	1.9	0.7	3.5	(Z)
Service wells.....	109	206	1,890	1.3	12.2	6.44	0.4	0.2	0.4	0.2	0.1
Multiple completions, total.....	109	358	3,284	2.3	21.1	6.42	0.6	0.2	0.8	0.4	0.3
Oil wells.....	89	277	3,112	1.7	19.1	6.14	0.5	0.1	0.6	0.2	0.2
Gas and gas condensate wells.....	20	81	4,050	0.6	31.7	7.83	0.1	0.1	0.2	0.2	0.1

See footnotes at end of table.

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967—Continued

(Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							Cost of lease equipment beyond the Christmas tree (million dollars)
				All costs			Cost, excluding lease equipment beyond the Christmas tree				
		Total	Per well	Total	Per well	Per foot	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors (million dollars)	Cost of casing, tubing, and well equipment (million dollars)	All other costs of drilling and equipping (million dollars)	
		(1,000 feet)	(feet)	(million dollars)	(\$1,000)	(dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
South Atlantic Division, Total.....	436	1,511	3,466	21.3	48.9	14.10	8.6	3.7	4.3	3.6	1.1
Oil wells.....	104	243	2,337	2.9	27.9	11.93	0.8	0.3	0.7	0.8	0.3
Gas and gas condensate wells.....	256	979	3,824	143	55.9	14.60	5.7	2.7	3.2	1.9	0.8
Multiple completions, total.....	32	108	3,375	1.6	50.0	14.81	0.7	0.1	0.3	0.5	(Z)
Oil wells.....	12	26	2,167	0.2	17.4	8.04	0.1	(Z)	(Z)	0.1	(Z)
Gas and gas condensate wells.....	20	82	4,100	1.4	69.1	16.84	0.6	0.1	0.3	0.4	(Z)
East South Central Division, Total.....	973	4,316	4,436	45.3	46.6	10.50	16.5	4.6	8.8	12.1	3.3
Oil wells.....	322	1,577	4,898	23.4	72.7	14.84	7.4	1.9	6.1	5.0	3.0
Gas and gas condensate wells.....	116	445	3,836	7.3	62.9	16.40	2.0	1.0	1.6	2.4	0.3
Dry holes.....	483	2,231	4,619	14.1	29.2	6.32	6.8	1.7	1.0	4.6	(Z)
Service wells.....	52	63	1,212	0.5	9.5	7.81	0.3	(Z)	0.1	0.1	(Z)
Kentucky, Total.....	571	1,150	2,014	9.1	15.9	7.91	3.5	0.5	1.8	3.1	0.2
Oil wells.....	169	300	1,775	2.8	16.6	9.33	1.0	0.1	0.8	0.7	0.2
Mississippi, Total.....	397	3,115	7,846	34.9	87.9	11.20	12.5	3.5	6.9	8.8	3.0
Oil wells.....	152	1,273	8,375	20.6	135.3	16.18	6.5	1.7	5.3	4.3	2.7
Dry holes.....	233	1,727	7,412	10.3	44.3	5.98	4.7	1.0	0.9	3.7	-
Multiple completions, total.....	10	143	14,300	4.1	408.2	28.55	1.5	0.3	1.1	0.7	0.4
Oil wells.....	10	143	14,300	4.1	408.2	28.55	1.5	0.3	1.1	0.7	0.4
West South Central Division, Total.....	10,981	68,792	6,265	1,364.7	124.3	19.84	456.6	137.9	278.5	416.5	75.2
Oil wells.....	5,305	29,909	5,638	556.9	105.0	18.62	161.2	50.9	128.4	166.1	50.3
Gas and gas condensate wells.....	1,552	13,028	8,394	390.6	251.7	29.98	118.5	35.2	94.9	119.3	22.7
Dry holes.....	3,595	24,248	6,745	398.6	110.9	16.44	171.8	50.1	50.3	125.4	1.0
Service wells.....	529	1,607	3,038	18.6	35.1	11.56	5.1	1.7	4.9	5.7	1.2
Multiple completions, total.....	1,235	10,277	8,321	316.0	255.9	30.75	83.7	25.8	71.7	112.9	21.9
Oil wells.....	944	7,558	8,006	217.3	230.2	28.75	57.3	16.7	48.0	81.0	14.3
Gas and gas condensate wells.....	291	2,719	9,344	98.7	339.2	36.31	26.4	9.1	23.7	31.9	7.6
West South Central Division, Offshore, Total.....	1,017	10,736	10,556	464.1	456.3	43.23	152.0	33.5	81.7	178.0	18.9
Oil wells.....	482	4,624	10,704	205.0	474.5	44.33	58.3	12.2	38.8	85.2	10.5
Dry holes.....	378	3,886	10,280	143.6	379.9	36.95	60.9	12.4	17.8	52.3	0.2
Multiple completions, total.....	334	3,716	11,126	188.5	56.4	50.73	49.4	13.6	37.7	76.3	11.5
Oil wells.....	255	2,801	10,984	136.8	53.6	48.83	36.5	9.0	26.0	58.3	7.0
Gas and gas condensate wells.....	79	915	11,582	51.7	65.4	56.49	12.9	4.6	11.7	18.0	4.5
Arkansas, Total.....	172	846	4,919	11.1	64.5	13.12	4.6	1.2	1.8	3.1	0.4
Gas and gas condensate wells.....	61	367	6,016	6.2	102.3	17.00	2.3	0.7	1.2	1.8	0.2
Dry holes.....	66	319	4,833	3.4	51.5	10.66	1.8	0.4	0.3	0.9	-
Multiple completions, total.....	25	149	5,960	2.9	115.1	19.31	1.1	0.4	0.6	0.7	0.1
Gas and gas condensate wells.....	25	149	5,960	2.9	115.1	19.31	1.1	0.4	0.6	0.7	0.1
Louisiana, Total.....	2,684	23,091	8,603	728.5	271.6	31.55	226.1	63.1	142.6	262.3	34.4
Oil wells.....	1,145	9,278	8,103	306.6	267.8	33.05	82.3	20.1	66.3	115.2	22.7
Gas and gas condensate wells.....	441	4,224	9,578	180.6	409.5	42.76	50.5	15.3	43.0	60.6	11.2
Dry holes.....	1,037	9,298	8,966	233.8	225.5	25.15	91.7	27.4	31.6	82.8	.3
Service wells.....	61	291	4,770	7.5	122.8	25.74	1.7	0.3	1.7	3.7	0.2
Multiple completions, total.....	510	5,355	10,500	228.8	448.6	42.73	59.7	16.8	49.3	88.4	14.6
Oil wells.....	406	4,138	10,192	169.3	417.0	40.91	44.0	11.5	35.9	67.3	10.6
Gas and gas condensate wells.....	104	1,217	11,702	59.5	572.2	48.90	15.7	5.3	13.4	21.1	4.0

See footnotes at end of table.

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967—Continued

[Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries]

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							Cost of lease equipment beyond the Christmas tree (million dollars)	
				All costs			Cost, excluding lease equipment beyond the Christmas tree					
		Total (1,000 feet)	Per well (feet)	Total (million dollars)	Per well (\$1,000)	Per foot (dollars)	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors (million dollars)	Cost of casing, tubing, and well equipment (million dollars)	All other costs of drilling and equipping (million dollars)		
West South Central Division--Continued												
Louisiana--Continued												
North Louisiana, Total.....	643	2,688	4,287	25.4	40.5	9.45	11.4	2.3	4.8	5.6	1.3	
Oil wells.....	254	806	3,173	9.5	37.4	11.79	3.3	0.6	2.5	2.2	0.8	
Gas and gas condensate wells.....	118	469	3,975	8.0	67.8	17.06	3.3	0.9	1.5	1.7	0.5	
Dry holes.....	255	1,380	5,411	7.6	29.8	5.51	4.7	0.7	0.5	1.6	(2)	
Service wells.....	16	33	2,063	0.3	21.1	10.21	0.1	0.1	0.1	0.1	(2)	
Multiple completions, total.....	12	88	7,333	1.9	158.3	21.59	0.8	0.2	0.3	0.5	0.1	
Oil wells.....	0.7	39	5,571	0.6	85.7	15.38	0.3	0.1	0.1	0.1	(2)	
Gas and gas condensate wells.....	181	49	9,800	1.3	257.0	26.22	0.5	0.1	0.2	0.4	0.1	
South Louisiana, Total.....	1,126	10,774	9,569	278.8	247.6	25.88	76.8	29.1	64.4	91.5	17.0	
Oil wells.....	474	3,983	8,403	98.3	2,073	24.68	22.5	7.6	26.4	30.1	11.7	
Gas and gas condensate wells.....	181	2,259	12,481	80.0	441.7	35.41	20.2	5.8	22.0	26.8	5.2	
Dry holes.....	451	4,451	9,869	98.7	218.8	22.17	33.8	15.6	15.4	33.9	(2)	
Service wells.....	20	81	4,050	1.8	89.2	22.01	0.3	0.1	0.6	0.7	0.1	
Multiple completions, total.....	188	1,783	9,484	49.7	264.4	27.87	12.0	3.5	14.6	14.9	4.7	
Oil wells.....	151	1,366	9,046	35.1	232.4	25.69	8.1	2.6	10.8	9.9	3.7	
Gas and gas condensate wells.....	37	417	11,270	14.6	393.7	34.93	3.9	0.9	3.8	5.0	1.0	
Offshore, Louisiana, Total.....	915	9,811	10,722	424.4	463.8	43.26	138.9	31.7	73.4	165.2	16.0	
Oil wells.....	417	4,489	10,765	198.8	476.7	44.29	56.5	11.9	37.3	83.0	10.1	
Gas ans gas condensate wells.....	142	1,678	11,817	92.7	652.8	65.28	27.0	8.6	19.4	32.1	5.6	
Dry holes.....	331	3,467	10,474	127.5	385.2	36.78	54.1	11.1	15.6	47.2	0.2	
Service wells.....	25	177	7,080	5.4	214.8	30.33	1.3	0.1	1.1	2.9	0.1	
Oklahoma, Total.....	2,120	11,340	5,349	131.8	62.2	11.62	50.8	17.2	24.8	29.4	9.6	
Gas and gas condensate wells.....	354	2,599	7,342	37.1	104.8	14.27	13.5	5.4	8.9	7.1	2.2	
Dry holes.....	611	3,495	5,720	34.5	56.5	9.87	17.6	5.2	2.7	8.8	0.2	
Multiple completions, total.....	216	1,308	6,056	16.7	27.3	12.77	5.4	2.4	3.5	3.7	1.7	
Oil wells.....	174	969	5,569	10.9	62.6	11.25	3.6	1.5	2.3	2.2	1.3	
Gas ans gas condensate wells.....	42	339	8,071	5.8	139.0	17.22	1.8	0.9	1.2	1.5	0.4	
Texas, Total.....	6,002	33,333	5,554	493.3	82.2	14.80	175.3	56.5	108.9	121.7	30.9	
Oil wells.....	3,123	15,606	4,997	191.3	61.3	12.26	59.6	24.4	49.3	37.6	20.4	
Gas and gas condensate wells.....	696	5,656	8,126	166.8	239.7	29.49	52.5	13.9	41.7	49.6	9.1	
Dry holes.....	1,881	11,136	5,920	126.9	67.5	11.40	60.5	17.1	15.6	33.1	0.6	
Service wells.....	302	935	3,096	8.3	27.6	8.93	2.7	1.1	2.3	1.4	0.8	
Multiple completions, total.....	484	3,465	7,159	67.6	139.7	19.51	17.5	6.3	18.4	20.0	5.4	
Oil wells.....	364	2,451	6,734	37.1	101.9	15.14	9.8	3.7	9.8	11.4	2.4	
Gas ans gas condensate.....	120	1,014	8,450	30.5	254.1	30.07	7.7	2.6	8.6	8.6	3.0	
Texas Gulf Coast A, Total.....	697	4,376	6,278	59.9	85.9	13.69	21.1	9.5	13.3	12.5	3.5	
Oil wells.....	361	1,864	5,161	24.1	66.8	12.93	6.8	3.3	6.4	4.9	2.7	
Gas and gas condensate wells.....	83	666	8,024	13.7	164.9	20.56	4.1	1.6	3.7	3.7	0.6	
Dry holes.....	244	1,816	7,443	21.6	88.5	11.89	10.1	4.5	3.0	3.9	0.1	
Service wells.....	9	30	3,333	0.5	58.9	17.67	0.1	0.1	0.2	(2)	0.1	
Multiple completions, total.....	54	442	8,185	6.4	118.5	14.48	1.5	0.7	2.4	1.4	0.4	
Texas Gulf Coast B, Total.....	268	1,860	6,940	23.1	86.2	12.42	7.4	3.4	5.3	5.9	1.1	
Oil wells.....	91	557	6,121	6.7	73.3	11.97	1.7	0.9	2.0	1.5	0.6	
Gas ans gas condensate wells.....	70	545	7,786	9.5	135.6	17.42	2.9	1.2	2.4	2.5	0.5	
Dry holes.....	95	711	7,484	6.5	68.4	9.14	2.7	1.2	0.8	1.8	(2)	
Service wells.....	12	47	3,917	0.4	31.4	8.02	0.1	0.1	0.1	0.1	(2)	
Multiple completions, total.....	44	284	6,455	4.6	104.5	16.20	1.1	0.6	1.5	1.2	0.2	
Oil wells.....	32	197	6,156	2.6	81.4	13.22	0.6	0.3	0.9	0.7	0.1	
Gas and gas condensate wells.....	12	87	7,250	2.0	169.2	23.33	0.5	0.3	0.6	0.5	0.1	

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators by Type of Wells and Geographic Area: 1967-Continued

(Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							Cost of lease equipment beyond the Christmas tree
				All costs			Cost, excluding lease equipment beyond the Christmas tree				
		Total	Per well	Total	Per well	Per foot	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors	Cost of casing, tubing, and well equipment	All other costs of drilling and equipping	
		(1,000 feet)	(feet)	(million dollars)	(\$1,000)	(dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
West South Central Division--Continued											
Texas--Continued											
South Texas, Total.....	607	4,231	6,970	71.1	117.1	16.80	21.0	8.9	16.3	20.8	4.1
Oil wells.....	224	1,357	6,058	15.7	70.1	11.57	4.4	2.3	4.1	3.1	1.8
Gas and gas condensate wells.....	147	1,277	8,687	35.3	240.1	27.64	9.5	3.6	9.1	10.9	2.2
Dry holes.....	224	1,560	6,964	19.8	88.5	12.69	7.0	3.0	3.0	6.7	0.1
Service wells.....	12	37	3,083	0.3	24.8	8.05	0.1	(Z)	0.1	0.1	(Z)
Multiple completions, total.....	111	862	7,766	19.2	173.0	22.27	5.3	2.7	5.0	5.2	1.0
Oil wells.....	70	490	7,000	6.9	98.1	14.02	1.9	1.3	1.9	1.4	0.4
Gas and gas condensate wells.....	41	372	9,073	12.3	299.7	33.03	3.4	1.4	3.1	3.8	0.6
Southwest Texas, Total.....	261	889	3,406	11.3	43.3	12.71	4.5	1.6	2.0	2.7	0.4
Oil wells.....	119	396	2,658	4.2	28.2	10.61	1.0	0.7	1.2	1.8	0.3
Gas and gas condensate wells.....	17	91	5,353	1.8	106.4	19.87	0.6	0.1	0.3	0.7	0.1
Dry holes.....	87	375	4,310	5.1	58.6	13.60	2.9	0.8	0.5	1.0	-
Service wells.....	8	27	3,375	0.2	19.8	5.85	(Z)	(Z)	(Z)	(Z)	(Z)
North Central Texas A, Total.....	1,004	3,620	3,606	24.4	24.3	6.74	10.8	2.6	4.5	4.5	2.0
Oil wells.....	538	1,811	3,366	14.3	26.1	7.90	4.9	1.2	3.6	2.8	1.8
Gas and gas condensate wells.....	73	408	5,589	3.7	50.1	9.07	1.8	0.7	0.5	0.5	0.1
Dry holes.....	349	1,294	3,708	5.7	16.3	4.40	3.8	0.6	0.2	1.1	(Z)
Service wells.....	44	117	2,659	0.7	16.5	0.3	0.1	0.2	0.1	0.1	(Z)
Multiple completions, total.....	40	189	4,725	3.8	95.0	20.11	0.4	0.1	0.3	2.9	0.2
Oil wells.....	37	172	4,649	3.6	96.7	20.81	0.3	0.1	0.2	2.9	0.2
Gas and gas condensate wells.....	3	17	5,667	0.2	55.3	9.76	0.1	(Z)	0.1	(Z)	(Z)
North Central Texas B, Total.....	507	1,837	3,623	10.8	21.3	5.87	5.3	0.8	2.5	1.6	0.6
Oil wells.....	246	908	3,691	6.5	26.4	7.16	2.7	0.4	1.8	1.1	0.5
Gas and gas condensate wells.....	13	45	3,462	0.3	26.5	7.67	0.1	(Z)	0.1	(Z)	(Z)
Dry holes.....	220	776	3,527	3.2	14.5	4.12	2.2	0.3	0.3	0.4	(Z)
Service wells.....	28	108	3,857	0.8	29.8	7.73	0.3	0.1	0.3	0.1	0.1
Multiple completions, total.....	11	119	10,818	0.8	72.7	6.72	0.3	0.1	0.2	0.2	(Z)
East Texas A, Total.....	139	823	5,921	11.0	79.1	13.37	4.7	0.9	1.8	2.8	0.6
Oil wells.....	33	145	4,394	1.4	42.4	9.66	0.4	0.1	0.3	0.5	0.1
Gas and gas condensate wells.....	22	222	10,091	4.6	209.5	20.76	1.7	0.5	1.1	1.0	0.3
Dry holes.....	72	436	6,046	4.8	66.7	11.01	2.5	0.3	0.4	1.3	0.2
Service wells.....	12	20	1,667	0.2	14.1	8.45	0.1	(Z)	(Z)	(Z)	(Z)
East Texas B, Total.....	256	1,553	6,066	18.0	70.3	11.59	7.8	2.1	3.7	3.1	1.3
Oil wells.....	105	549	5,229	6.2	59.0	11.29	2.1	0.7	1.6	1.0	0.8
Gas and gas condensate wells.....	45	333	7,400	5.3	117.8	15.92	2.0	0.7	1.5	0.8	0.3
Dry holes.....	92	631	6,859	6.0	65.2	9.51	3.6	0.7	0.5	1.2	(Z)
Service wells.....	14	40	2,857	0.5	33.5	11.72	0.1	(Z)	0.1	0.1	0.2
Multiple completions, total.....	8	53	6,625	0.6	77.5	11.70	0.2	(Z)	0.1	0.1	0.1
West Texas A, Total.....	1,348	7,963	5,907	151.7	112.5	19.05	54.2	14.6	35.3	38.5	10.0
Oil wells.....	876	4,651	5,309	65.4	74.7	14.06	21.0	8.7	16.5	11.5	7.9
Gas and gas condensate wells.....	79	860	10,886	56.5	715.7	65.75	19.0	2.6	14.0	19.4	1.7
Dry holes.....	288	2,030	7,049	25.6	88.9	12.61	13.0	2.7	3.7	6.8	(Z)
Service wells.....	105	422	4,019	4.2	39.6	8.85	1.2	0.6	1.1	0.8	0.4
Multiple completions, total.....	53	348	6,566	8.5	160.4	24.43	2.6	0.6	2.1	2.3	0.9
Oil wells.....	49	299	6,102	5.7	117.2	19.21	1.7	0.5	1.5	1.4	0.6
Gas and gas condensate wells.....	4	49	12,250	2.8	691.0	56.41	0.9	0.1	0.6	0.9	0.3
West Texas B, Total.....	489	3,391	6,935	42.7	87.3	12.59	15.0	6.2	10.1	9.1	2.1
Oil wells.....	343	2,379	6,936	28.1	81.8	11.79	9.5	4.5	7.3	5.1	1.7
Gas and gas condensate wells.....	43	361	8,395	8.3	192.0	22.87	2.7	1.0	2.1	2.1	0.3
Dry holes.....	95	618	6,505	6.1	64.2	9.87	2.7	0.7	0.6	1.9	0.1
Service wells.....	8	33	4,125	0.2	26.5	6.42	0.1	(Z)	0.1	(Z)	(Z)
Multiple completions, total.....	103	712	6,913	9.3	90.3	13.06	2.8	0.8	2.6	2.6	0.5

See footnotes at end of table.

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967--Continued

(Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							
				All costs			Cost, excluding lease equipment beyond the Christmas tree				Cost of lease equipment beyond the Christmas tree (million dollars)
		Total	Per well	Total	Per well	Per foot	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors (million dollars)	Cost of casing, tubing, and well equipment (million dollars)	All other costs of drilling and equipping (million dollars)	
		(1,000 feet)	(feet)	(million dollars)	(\$1,000)	(dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	
West South Central Division--Continued											
Texas--Continued											
Texas Panhandle, Total.....	277	1,810	6,534	29.0	104.7	16.02	9.7	3.8	5.7	7.5	2.4
Oil wells.....	142	854	6,014	12.4	87.4	14.53	3.6	1.3	2.9	2.8	1.9
Gas and gas condensate wells.....	64	482	7,531	10.3	161.2	21.40	3.4	1.6	2.2	2.6	0.5
Dry holes.....	64	459	7,172	6.1	95.9	13.37	2.6	0.9	0.6	2.1	-
Service wells.....	7	15	2,143	0.2	22.3	10.40	0.1	(Z)	(Z)	(Z)	(Z)
Multiple completions, total.....	22	140	6,364	2.1	95.5	15.00	0.6	0.1	0.5	0.6	0.3
Oil wells.....	16	102	6,375	1.5	96.4	15.13	0.4	0.1	0.3	0.5	0.3
Gas and gas condensate wells.....	6	38	6,333	0.6	99.3	15.68	0.2	(Z)	0.2	0.1	(Z)
Offshore Texas, Total.....	102	925	9,069	39.7	389.2	42.92	14.2	1.8	8.2	12.7	2.8
Oil wells.....	15	135	9,000	6.2	412.1	45.79	1.9	0.3	1.5	2.2	0.3
Gas and gas condensate wells.....	40	371	9,275	17.4	435.0	46.90	4.6	0.2	4.6	5.4	2.5
Dry holes.....	47	419	8,915	16.1	342.9	38.46	7.7	1.2	2.1	5.1	-
Mountain, Total.....	2,164	11,713	5,413	180.1	83.2	15.38	69.9	24.3	32.4	38.1	15.3
Oil wells.....	1,114	5,643	5,066	96.8	86.9	17.15	31.4	13.7	21.6	16.4	13.4
Gas and gas condensate wells.....	281	1,720	6,121	31.6	112.6	18.37	10.7	3.9	6.4	9.2	1.5
Dry holes.....	705	4,070	5,773	47.9	67.9	11.77	26.3	6.4	3.5	11.6	0.1
Service wells.....	64	280	4,375	3.8	59.5	13.60	1.5	0.3	0.9	0.9	0.3
Multiple completions, total.....	122	746	6,115	15.2	124.6	20.38	4.2	0.9	3.2	5.7	1.2
Oil wells.....	73	420	5,753	7.8	106.3	18.47	2.3	0.5	1.8	2.3	0.8
Gas and gas condensate wells.....	49	326	6,653	7.4	150.8	22.66	1.9	0.4	1.4	3.4	0.4
Montana, Total.....	943	5,258	5,576	64.8	68.7	12.32	32.4	8.1	7.7	14.1	2.7
Oil wells.....	174	930	5,345	13.3	76.4	14.30	4.7	1.4	3.3	1.6	2.3
Gas and gas condensate wells.....	5	14	2,800	0.1	29.8	10.64	0.1	(Z)	(Z)	(Z)	(Z)
Wyoming, Total.....	638	3,368	5,279	50.2	78.7	14.90	20.1	8.3	8.5	9.3	4.1
Oil wells.....	348	1,567	4,502	27.1	77.9	17.29	8.3	5.0	6.2	4.1	3.5
Gas and gas condensate wells.....	37	260	7,027	5.7	154.3	21.92	2.2	1.0	1.0	1.0	0.6
Dry holes.....	220	1,444	6,564	16.1	73.2	11.15	9.1	2.2	0.9	3.9	(Z)
Service wells.....	33	97	2,939	1.3	39.8	13.55	0.5	0.1	0.4	0.3	(Z)
Multiple completions, total.....	33	148	4,485	3.0	90.9	20.27	1.0	0.4	0.5	0.8	0.5
Oil wells.....	30	133	4,433	2.5	84.0	18.94	0.9	0.3	0.4	0.6	0.4
Gas and gas condensate wells.....	3	15	5,000	0.5	160.0	32.00	0.1	0.1	0.1	0.2	0.1
Colorado, Total.....	258	1,396	5,411	19.8	76.7	14.18	7.4	3.0	3.0	3.9	2.1
Oil wells.....	102	582	5,706	11.3	110.8	19.42	3.7	1.7	2.1	1.7	1.9
Dry holes.....	119	622	5,227	4.7	39.5	7.56	2.5	0.8	0.3	1.0	(Z)
New Mexico, Total.....	774	4,325	5,588	68.6	92.0	15.86	24.7	7.8	14.8	15.7	5.3
Oil wells.....	424	2,234	5,269	35.5	83.7	15.89	11.7	4.1	8.5	6.4	4.6
Gas and gas condensate wells.....	194	1,212	6,247	21.0	108.2	17.31	6.9	2.2	4.6	6.6	0.6
Dry holes.....	146	841	5,760	11.1	76.3	13.25	5.8	1.4	1.5	2.4	(Z)
Service wells.....	10	38	3,800	1.0	97.9	25.76	0.3	0.1	0.2	0.3	0.1
Multiple completions, total.....	66	472	7,152	10.2	154.5	21.61	2.7	0.3	2.3	4.3	0.6
Oil wells.....	24	185	7,708	3.9	161.3	20.92	1.1	0.2	1.1	1.2	0.3
Gas and gas condensate wells.....	42	287	6,833	6.3	149.9	21.93	1.6	0.1	1.2	3.1	0.3
West New Mexico, Total.....	243	1,198	4,930	16.3	67.1	13.61	5.7	2.0	3.5	4.8	0.5
Oil wells.....	39	96	2,462	1.6	41.9	17.03	0.5	0.2	0.4	0.4	0.1
Gas and gas condensate wells.....	166	965	5,813	12.9	77.6	13.35	4.3	1.4	2.9	4.0	0.4
Dry holes.....	38	137	3,605	1.8	48.3	13.39	0.9	0.4	0.2	0.4	-
Multiple completions, total.....	42	274	6,524	4.3	102.4	15.69	1.3	0.1	0.9	1.8	0.2
Gas and gas condensated wells.....	39	257	6,590	4.0	101.3	15.38	1.2	0.1	0.8	1.7	0.2
East New Mexico, Total.....	521	3,089	5,929	50.9	97.7	16.48	18.5	5.8	11.2	10.6	4.6
Oil wells.....	385	2,138	5,553	33.8	87.8	15.81	11.2	3.9	8.1	6.0	4.4
Gas and gas condensate wells.....	28	247	8,821	8.1	289.2	32.79	2.6	0.9	1.7	2.6	0.2
Dry holes.....	108	704	6,519	9.0	83.3	12.78	4.7	1.0	1.4	2.0	(Z)
Multiple completions, total.....	24	198	8,250	5.9	245.8	29.80	1.4	0.2	1.5	2.5	0.3

See footnotes at end of table.

TABLE 6B. Drilling Statistics for Oil, Gas and Gas Condensate, Dry, and Service Wells as Reported by Operators, by Type of Wells and Geographic Area: 1967-Continued

[Represents holes drilled and completed during the year by operators (except single-unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries]

Geographic area and type of well	Wells drilled	Footage drilled		Cost of drilling and equipping wells							
				All costs			Cost, excluding lease equipment beyond the Christmas tree				Cost of lease equipment beyond the Christmas tree (million dollars)
		Total (1,000 feet)	Per well (feet)	Total (million dollars)	Per well (\$1,000)	Per foot (dollars)	Payments to drilling contractors including day work and turnkey (million dollars)	Payments to other contractors (million dollars)	Cost of casing, tubing, and well equipment (million dollars)	All other costs of drilling and equipping (million dollars)	
Pacific, Total.....	2,586	7,823	3,025	332.1	128.4	42.45	102.7	43.6	62.2	88.5	35.4
Oil wells.....	2,142	5,168	2,413	223.0	104.1	43.15	51.6	27.2	53.8	56.8	33.7
Gas and gas condensate wells.....	68	461	6,779	11.9	174.5	25.74	3.9	1.0	2.3	4.4	0.3
Dry holes.....	285	1,924	6,751	90.0	315.8	46.79	45.3	14.5	4.7	25.3	0.3
Service wells.....	91	270	2,967	7.2	79.6	26.83	1.9	0.9	1.4	2.0	1.1
Multiple completions, total.....	52	356	6,846	14.6	280.8	41.01	2.8	1.5	2.3	4.8	3.1
Oil wells.....	51	349	6,843	14.5	284.3	41.55	2.8	1.5	2.3	4.8	3.1
Gas and gas condensate wells.....	1	7	7,000	0.1	100.0	14.29	(Z)	(Z)	(Z)	(Z)	(Z)
Pacific, Offshore, Total.....	359	2,068	5,760	202.4	563.8	97.87	59.6	30.5	39.5	47.9	24.6
Oil wells.....	299	1,565	5,234	146.2	489.0	93.42	31.6	18.7	35.9	36.3	23.7
Gas and gas condensate wells.....	1	8	8,000	0.3	300.0	37.50	0.1	0.1	(Z)	0.1	(Z)
Dry holes.....	45	417	9,266	52.1	1,157.8	134.94	27.0	11.3	2.9	10.5	0.1
Service wells.....	14	78	5,571	3.8	271.4	48.72	0.9	0.4	0.7	1.0	0.8
Multiple completions, total.....	38	228	6,000	11.5	30.4	5.06	2.2	1.0	1.7	3.7	3.0
Oil wells.....	38	228	6,000	11.5	30.4	5.06	2.2	1.0	1.7	3.7	3.0
California, Total.....	2,504	6,979	2,787	200.5	80.1	28.72	61.8	21.2	34.2	53.9	28.7
Oil wells.....	2,101	4,755	2,263	151.3	72.0	31.82	36.6	15.6	29.2	42.6	27.2
Dry holes.....	250	1,547	6,188	35.0	140.0	22.62	20.7	3.8	1.9	8.4	0.2
North California, Total.....	121	801	6,620	12.3	101.7	15.36	6.2	1.4	1.9	2.6	0.2
Dry holes.....	68	432	6,353	5.3	78.6	12.38	3.6	0.6	0.3	0.9	(Z)
East Central California, Total.....	1,690	3,187	1,886	54.1	32.0	16.97	16.2	6.0	11.0	14.5	6.2
Oil wells.....	1,520	2,422	1,593	42.3	27.8	17.46	10.9	4.6	10.4	10.4	5.9
Gas and gas condensate wells.....	5	15	3,000	0.2	34.4	11.47	0.1	(Z)	(Z)	(Z)	(Z)
Dry holes.....	119	648	5,445	10.1	85.1	15.63	4.7	1.2	0.3	3.8	0.1
Service wells.....	46	102	2,217	1.5	31.6	14.26	0.5	0.2	0.3	0.3	0.2
Central Coastal California, Total.....	164	569	3,470	14.7	89.6	25.83	5.6	1.3	2.7	3.4	1.9
South California, Total.....	255	1,046	4,102	28.7	112.5	27.44	8.5	3.5	6.0	8.5	2.3
Oil wells.....	198	760	3,838	23.3	117.6	30.63	5.7	2.9	5.2	7.3	2.2
Offshore, California, Total.....	295	1,416	4,800	92.0	311.9	64.97	26.0	0.2	12.8	25.8	18.1
Oil wells.....	258	1,152	4,465	74.5	288.6	64.64	16.5	7.1	11.4	22.1	17.3
Alaska, Total.....	76	793	10,434	125.8	1,655.3	158.64	38.3	21.5	27.8	31.6	6.6
Oil wells.....	41	413	10,073	71.7	1,749.7	173.70	15.0	11.6	24.5	14.2	6.4
Offshore, Alaska, Total.....	59	608	10,305	104.7	1,774.6	172.20	31.0	20.4	26.6	20.0	6.5
Oil wells.....	41	413	10,073	71.7	1,749.7	173.70	15.0	11.6	24.5	14.2	6.4

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Represents less than one half of the unit of measure specified.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well

(See text under "Industry Description")

Geographic Area and type of well	1967			1963					
	Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments			Drilling for all establishments			Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
United States, total.....	21,620	108,751	2,047.8	41,843	179,430	2,099.2	29,891	142,113	1,880.8
Oil wells.....	11,033	48,870	958.0	19,837	80,410	1,049.0	14,819	66,057	950.5
Gas and gas condensate wells.....	2,678	18,199	469.9	4,578	25,241	416.1	3,348	20,501	378.7
Dry holes.....	6,867	38,815	582.0	14,794	69,004	599.6	9,565	51,458	520.0
Service wells.....	1,042	2,807	38.0	2,634	4,775	34.5	2,159	4,097	31.8
Middle Atlantic Division, total.....	558	1,294	10.3	815	1,864	13.2	534	1,326	11.0
Oil wells.....	279	406	2.3	385	577	1.9	210	284	1.1
Gas and gas condensate wells.....	181	672	6.5	185	728	7.5	137	571	6.5
New York, total.....	100	154	.9	224	367	2.8	136	(D)	(D)
Oil wells.....	75	111	.6	124	150	0.4	69	93	0.4
Pennsylvania, total.....	450	1,130	9.5	591	1,497	10.4	398	(D)	(D)
Oil wells.....	204	295	1.6	261	427	1.5	141	191	0.8
Dry holes.....	40	124	9.0	68	219	1.7	47	187	1.6
East North Central Division, total.....	1,659	5,005	38.8	4,012	9,232	59.4	2,331	5,789	40.2
Oil wells.....	875	2,754	21.7	1,633	3,676	30.4	1,000	2,339	20.9
Gas and gas condensate wells.....	118	463	4.1	334	965	7.2	201	639	5.4
Dry holes.....	530	1,520	7.6	1,674	4,003	18.0	830	2,305	10.6
Service wells.....	136	268	5.4	371	588	3.8	300	506	3.4
Illinois, total.....	728	1,949	32.6	1,764	3,641	23.3	1,059	(D)	(D)
Oil wells.....	401	1,138	24.5	777	1,663	14.6	467	1,012	10.0
Dry holes.....	213	580	3.1	703	1,541	5.8	355	844	3.2
West North Central Division, total.....	2,263	8,297	55.2	4,710	15,012	100.3	3,462	(D)	(D)
Oil wells.....	892	3,170	31.0	2,103	6,350	58.4	1,412	4,793	47.4
Gas and gas condensate wells.....	106	431	3.6	220	726	6.5	174	608	5.6
Dry holes.....	1,150	4,465	18.8	1,979	7,368	32.1	1,531	5,986	27.3
Service wells.....	115	231	1.8	408	568	3.3	345	(D)	(D)
Kansas, total.....	2,070	7,263	42.5	4,039	11,620	76.7	2,987	9,334	63.2
Oil wells.....	817	2,643	22.7	1,883	5,112	44.6	1,239	3,773	35.5
Gas and gas condensate wells.....	91	374	3.4	217	713	6.4	171	595	5.5
Dry holes.....	1,053	4,040	15.1	1,546	5,274	22.8	1,246	4,507	19.6
Service wells.....	109	206	1.3	393	521	2.9	331	459	2.6
South Atlantic Division, total.....	436	1,511	21.3	1,084	2,907	29.4	510	(D)	(D)
Oil wells.....	104	243	2.9	233	497	4.0	110	248	2.0
Gas and gas condensate wells.....	256	979	14.2	677	1,885	19.2	315	863	9.3
East South Central Division, total.....	973	4,316	45.3	2,376	9,271	76.2	1,422	6,643	61.1
Oil wells.....	322	1,577	23.4	958	3,919	42.5	601	2,789	34.3
Gas and gas condensate wells.....	116	445	7.3	181	676	7.2	128	500	6.1
Dry holes.....	483	2,231	14.1	1,041	4,436	25.0	529	3,145	19.3
Service wells.....	52	63	.5	196	240	1.5	164	209	1.4
Kentucky, total.....	571	1,150	9.1	1,575	2,650	17.8	883	1,548	12.2
Oil wells.....	169	300	2.8	632	1,054	8.5	352	551	5.4
Dry holes.....	246	470	2.5	607	960	3.9	267	497	2.2
West South Central Division, total.....	10,981	68,792	1,364.7	22,833	114,806	1,437.7	16,477	92,116	1,314.6
Oil wells.....	5,305	29,909	556.9	11,238	53,107	703.0	8,499	44,345	645.5
Gas and gas condensate wells.....	1,552	13,028	390.6	2,395	16,704	309.5	1,907	14,336	294.1
Dry holes.....	3,595	24,248	398.6	7,900	42,235	404.7	5,032	31,087	356.2
Service wells.....	529	1,607	18.6	1,300	2,760	20.5	1,039	2,348	18.8
Arkansas, total.....	172	846	11.1	390	1,564	13.0	240	(D)	(D)
Gas and gas condensate wells.....	61	367	6.2	39	249	4.7	34	219	4.1
Dry holes.....	66	319	3.4	167	671	4.1	89	376	2.5
Louisiana, total.....	2,684	23,091	728.5	5,007	33,913	607.6	3,745	(D)	(D)
Oil wells.....	1,145	9,278	306.6	2,419	14,788	277.1	1,877	12,666	266.8
Gas and gas condensate wells.....	441	4,224	180.6	585	4,872	136.2	489	4,413	131.5
Dry holes.....	1,037	9,298	233.8	1,969	14,153	193.4	1,346	10,953	180.7
Service wells.....	61	291	7.5	34	100	1.0	33	(D)	(D)
North Louisiana, total.....	643	2,688	25.4	2,691	10,472	61.3	1,505	5,285	38.7
Oil wells.....	254	806	9.5	1,332	4,402	28.3	801	2,370	18.8
Gas and gas condensate wells.....	118	469	8.0	284	1,172	12.5	198	783	8.8
Dry holes.....	255	1,380	7.6	1,060	4,865	20.2	491	2,099	10.9
Service wells.....	16	33	.3	15	33	0.2	15	33	0.2
South Louisiana, total ¹	1,126	10,774	278.8	2,316	23,441	546.3	2,240	(D)	(D)
Oil wells ¹	474	3,983	98.3	1,087	10,386	248.7	1,076	10,296	248.0
Gas and gas condensate wells ¹	181	2,259	80.0	301	3,700	123.6	291	3,630	122.7
Dry holes ¹	451	4,451	98.7	909	9,288	173.2	855	8,854	169.8
Service wells ¹	20	81	1.8	19	67	0.7	18	(D)	(D)

See footnotes at end of table.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well—Continued

(See text under "Industry Description")

Geographic Area and type of well	1963--Continued					
	Drilling for single-unit establishments with 1 to 4 employees			Drilling for single-unit establishments with no employees		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
United States, total.....	5,012	13,911	76.4	6,940	23,406	141.9
Oil wells.....	2,482	6,277	41.2	2,536	8,076	57.3
Gas and gas condensate wells.....	344	1,285	10.3	886	3,455	27.1
Dry holes.....	1,856	5,868	23.2	3,373	11,678	56.5
Service wells.....	330	481	1.8	145	197	0.9
Middle Atlantic Division, total.....	137	(D)	(D)	144	(D)	(D)
Oil wells.....	92	200	0.5	83	93	0.3
Gas and gas condensate wells.....	20	62	0.5	28	95	0.6
New York, total.....	19	29	0.1	69	(D)	(D)
Oil wells.....	16	18	0.1	39	39	(Z)
Pennsylvania, total.....	118	(D)	(D)	75	(D)	(D)
Oil wells.....	76	182	0.4	44	54	0.3
Dry holes.....	14	17	0.1	7	15	0.1
East North Central Division, total.....	743	1,499	9.0	938	1,944	10.1
Oil wells.....	371	788	5.7	262	549	3.8
Gas and gas condensate wells.....	49	68	0.4	84	258	1.4
Dry holes.....	296	611	2.8	548	1,087	4.6
Service wells.....	27	32	0.1	44	50	0.3
Illinois, total.....	359	(D)	(D)	346	(D)	(D)
Oil wells.....	184	396	2.8	126	255	1.8
Dry holes.....	148	304	1.2	200	393	1.4
West North Central Division, total.....	671	(D)	(D)	577	(D)	(D)
Oil wells.....	395	770	5.3	296	787	5.7
Gas and gas condensate wells.....	22	68	0.5	24	50	0.4
Dry holes.....	208	674	2.7	240	708	2.0
Service wells.....	46	(D)	(D)	17	(D)	(D)
Kansas, total.....	602	1,228	7.2	450	1,058	6.3
Oil wells.....	378	688	4.5	266	651	4.7
Gas and gas condensate wells.....	22	68	0.5	24	50	0.4
Dry holes.....	157	422	2.1	143	345	1.1
Service wells.....	45	50	0.2	17	12	(Z)
South Atlantic Division, total.....	105	(D)	(D)	469	(D)	(D)
Oil wells.....	41	80	0.6	82	169	1.5
Gas and gas condensate wells.....	48	116	0.9	314	906	9.0
East South Central Division, total.....	411	1,023	5.5	543	1,605	9.6
Oil wells.....	200	556	3.8	157	574	4.4
Gas and gas condensate wells.....	14	73	0.3	39	103	0.8
Dry holes.....	172	369	1.4	340	922	4.4
Service wells.....	25	25	(Z)	7	6	(Z)
Kentucky, total.....	335	519	2.9	357	583	2.7
Oil wells.....	158	273	2.0	122	230	1.1
Dry holes.....	145	204	0.7	195	259	0.9
West South Central Division, total.....	2,650	8,227	42.2	3,706	14,463	80.9
Oil wells.....	1,267	3,501	21.9	1,472	5,261	35.6
Gas and gas condensate wells.....	170	773	5.8	318	1,595	9.7
Dry holes.....	1,004	3,633	13.4	1,864	7,515	35.1
Service wells.....	209	320	1.2	52	92	0.4
Arkansas, total.....	24	(D)	(D)	126	(D)	(D)
Gas and gas condensate wells.....	-	-	-	5	30	0.6
Dry holes.....	11	36	0.1	67	259	1.5
Louisiana, total.....	357	(D)	(D)	905	4,195	20.4
Oil wells.....	166	628	2.7	376	1,494	7.6
Gas and gas condensate wells.....	16	87	1.0	80	372	3.6
Dry holes.....	174	871	3.5	426	2,329	9.2
Service wells.....	1	(D)	(D)	-	-	-
North Louisiana, total.....	307	(D)	(D)	879	(D)	(D)
Oil wells.....	158	(D)	(D)	373	(D)	(D)
Gas and gas condensate wells.....	6	17	0.2	80	372	3.6
Dry holes.....	143	647	1.8	426	2,119	7.5
Service wells.....	-	-	-	-	-	-
South Louisiana, total ¹	50	(D)	(D)	26	(D)	(D)
Oil wells ¹	8	(D)	(D)	3	(D)	(D)
Gas and gas condensate wells ¹	10	70	0.9	-	-	-
Dry holes ¹	31	224	1.7	23	210	1.6
Service wells ¹	1	(D)	(D)	-	-	-

See footnotes at end of table.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well—Continued

(See text under "Industry Description")

Geographic Area and type of well	1967			1963					
	Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments			Drilling for all establishments			Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
West South Central Division--Continued									
Oklahoma, total.....	2,120	11,340	131.8	4,314	17,187	174.8	3,277	14,326	156.0
Gas and gas condensate wells.....	354	4,869	37.0	470	2,849	37.8	419	2,657	35.9
Dry holes.....	611	3,495	34.5	1,167	5,144	42.5	823	4,108	37.4
Texas, total.....	6,002	33,333	493.3	13,122	62,142	642.3	9,215	48,637	569.2
Oil wells.....	3,123	15,606	191.3	6,604	29,587	333.4	4,964	24,560	298.4
Gas and gas condensate wells.....	696	5,656	166.8	1,301	8,734	130.8	965	7,047	122.5
Dry holes.....	1,881	11,136	126.9	4,597	22,267	164.6	2,774	15,650	135.5
Service wells.....	302	935	8.3	620	1,554	13.5	512	1,380	12.8
Texas Gulf Coast A, total ¹	697	4,376	59.9	1,176	7,837	103.1	1,019	7,110	98.5
Oil wells ¹	361	1,864	24.1	582	3,301	46.1	516	3,050	44.0
Gas and gas condensate wells ¹	83	666	13.7	153	1,331	24.8	137	1,235	24.3
Dry holes ¹	244	1,816	21.6	417	3,150	31.6	346	2,781	29.7
Service wells ¹	9	30	.5	24	55	0.5	20	44	0.5
Texas Gulf Coast B, total ¹	268	1,860	23.1	657	4,129	39.2	529	3,670	36.8
Oil wells ¹	91	557	6.7	183	1,079	11.9	139	962	10.8
Gas and gas condensate wells ¹	70	545	9.5	152	1,034	14.4	131	959	14.0
Dry holes ¹	95	711	6.5	314	1,981	12.8	251	1,714	11.8
Service wells ¹	12	47	.4	8	35	0.2	8	35	0.2
South Texas, total ¹	607	4,231	71.1	1,196	7,142	80.5	991	6,244	76.8
Oil wells ¹	224	1,357	15.7	470	2,577	26.9	423	2,365	25.7
Gas and gas condensate wells ¹	147	1,277	35.3	273	2,047	30.0	215	1,764	28.7
Dry holes ¹	224	1,560	19.8	421	2,422	22.9	321	2,019	21.6
Service wells ¹	12	37	.3	32	96	0.9	32	96	0.9
Southwest Texas, total.....	261	889	11.3	656	2,120	12.1	308	(D)	(D)
Oil wells.....	149	396	4.2	309	811	5.4	161	411	3.3
Gas and gas condensate wells.....	17	91	1.8	38	176	2.1	26	114	1.8
Dry holes.....	87	375	5.1	295	1,088	4.5	108	432	2.3
Service wells.....	8	27	.2	14	45	0.2	13	(D)	(D)
North Central Texas A, total.....	1,004	3,620	24.4	2,703	7,812	49.4	1,523	5,021	35.8
Oil wells.....	538	1,811	14.3	1,473	4,078	30.2	856	2,706	21.8
Gas and gas condensate wells.....	73	408	3.7	111	604	6.5	89	483	5.4
Dry holes.....	349	1,294	5.7	966	2,826	10.4	464	1,588	6.5
Service wells.....	44	117	.7	153	304	2.2	114	244	2.1
North Central Texas B, total.....	507	1,837	10.8	1,509	4,774	29.3	790	2,823	20.0
Oil wells.....	246	908	6.5	613	2,020	17.0	337	1,274	12.2
Gas and gas condensate wells.....	13	45	.3	75	244	1.7	35	122	0.9
Dry holes.....	220	776	3.2	746	2,397	10.0	364	1,347	6.3
Service wells.....	28	108	.8	75	113	0.6	54	80	0.4
East Texas A, total.....	139	823	11.0	345	1,973	19.9	267	(D)	(D)
Oil wells.....	33	145	1.4	174	909	10.4	139	768	8.9
Gas and gas condensate wells.....	22	222	4.6	39	288	3.7	24	212	3.3
Dry holes.....	72	436	4.8	117	761	5.8	97	665	5.2
Service wells.....	12	20	.2	15	15	(Z)	7	(D)	(D)
East Texas B, total.....	256	1,553	18.0	573	2,983	29.1	383	(D)	(D)
Oil wells.....	105	549	6.2	269	1,210	14.0	228	1,046	13.1
Gas and gas condensate wells.....	45	333	5.3	75	434	6.5	42	231	5.5
Dry holes.....	92	631	6.0	219	1,321	8.5	107	718	5.2
Service wells.....	14	40	.5	10	18	0.1	6	(D)	(D)
West Texas A, total.....	1,348	7,963	151.7	2,748	15,509	191.0	2,206	12,745	173.4
Oil wells.....	876	4,651	65.4	1,677	9,389	123.4	1,502	8,544	116.9
Gas and gas condensate wells.....	79	860	56.5	133	1,024	19.1	80	709	17.7
Dry holes.....	288	2,030	25.6	714	4,371	40.7	420	2,801	31.3
Service wells.....	105	422	4.2	224	725	7.8	204	691	7.5
West Texas B, total.....	489	3,391	42.7	653	3,454	36.3	528	2,945	32.2
Oil wells.....	343	2,379	28.1	342	1,878	21.3	269	1,557	18.0
Gas and gas condensate wells.....	43	361	8.3	53	376	5.6	45	324	5.2
Dry holes.....	95	618	6.1	227	1,130	9.1	183	994	8.5
Service wells.....	8	33	.2	31	70	0.4	31	70	0.4
Texas Panhandle, total.....	277	1,810	29.0	906	4,409	52.4	671	3,416	46.9
Oil wells.....	142	854	12.4	512	2,335	26.9	394	1,877	23.6
Gas and gas condensate wells.....	64	482	10.3	199	1,176	16.6	141	894	15.7
Dry holes.....	64	459	6.1	161	820	8.4	113	591	7.1
Service wells.....	7	15	.2	34	78	0.5	23	54	0.4

See footnotes at end of table.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well—Continued

(See text under "Industry Description")

Geographic Area and type of well	1963--Continued					
	Drilling for single-unit establishments with 1 to 4 employees			Drilling for single-unit establishments with no employees		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
West South Central Division--Continued						
Oklahoma, total.....	626	1,636	9.5	411	1,225	9.3
Gas and gas condensate wells.....	34	128	1.1	17	64	0.8
Dry holes.....	151	452	2.0	193	584	3.1
Texas, total.....	1,643	4,945	25.2	2,264	8,560	47.9
Oil wells.....	785	2,014	13.6	855	3,013	21.4
Gas and gas condensate wells.....	120	558	3.6	216	1,129	4.7
Dry holes.....	668	2,274	7.7	1,155	4,343	21.4
Service wells.....	70	99	0.3	38	75	0.4
Texas Gulf Coast A, total ¹	102	(D)	(D)	55	(D)	(D)
Oil wells ¹	47	163	1.3	19	88	0.8
Gas and gas condensate wells ¹	6	42	0.2	10	54	0.3
Dry holes ¹	46	210	0.9	25	159	1.1
Service wells ¹	3	(D)	(D)	1	(D)	(D)
Texas Gulf Coast B, total ¹	82	288	1.6	46	171	0.9
Oil wells ¹	33	71	0.7	11	46	0.4
Gas and gas condensate wells ¹	10	42	0.2	11	33	0.2
Dry holes ¹	39	175	0.7	24	92	0.3
Service wells ¹	-	-	-	-	-	-
South Texas, total ¹	112	397	1.8	93	501	1.9
Oil wells ¹	31	112	0.7	16	100	0.5
Gas and gas condensate wells ¹	25	87	0.5	33	196	0.7
Dry holes ¹	56	198	0.6	44	205	0.7
Service wells ¹	-	-	-	-	-	-
Southwest Texas, total.....	155	(D)	(D)	193	(D)	(D)
Oil wells.....	72	206	1.0	76	194	1.1
Gas and gas condensate wells.....	10	(D)	(D)	2	(D)	(D)
Dry holes.....	72	336	0.9	115	320	1.2
Service wells.....	1	(D)	(D)	-	-	-
North Central Texas A, total.....	570	1,157	5.3	610	1,634	8.2
Oil wells.....	314	585	3.6	303	787	4.8
Gas and gas condensate wells.....	10	64	0.6	12	57	0.6
Dry holes.....	222	478	1.1	280	760	2.8
Service wells.....	24	30	0.1	15	30	0.1
North Central Texas B, total.....	244	641	3.1	475	1,310	6.2
Oil wells.....	99	251	1.6	177	495	3.1
Gas and gas condensate wells.....	23	73	0.5	17	49	0.3
Dry holes.....	106	290	1.0	276	760	2.8
Service wells.....	16	27	0.1	5	6	(Z)
East Texas A, total.....	45	(D)	(D)	33	(D)	(D)
Oil wells.....	16	25	0.2	19	116	1.3
Gas and gas condensate wells.....	14	(D)	(D)	1	(D)	(D)
Dry holes.....	7	38	0.1	13	58	0.4
Service wells.....	8	(D)	(D)	-	-	-
East Texas B, total.....	56	(D)	(D)	134	731	3.9
Oil wells.....	20	69	0.5	21	95	0.4
Gas and gas condensate wells.....	5	36	0.2	28	167	0.7
Dry holes.....	27	134	0.4	85	469	2.9
Service wells.....	4	(D)	(D)	-	-	-
West Texas A, total.....	175	(D)	(D)	367	(D)	(D)
Oil wells.....	96	332	2.8	79	513	3.8
Gas and gas condensate wells.....	5	(D)	(D)	48	(D)	(D)
Dry holes.....	65	314	1.5	229	1,256	7.9
Service wells.....	9	(D)	(D)	11	(D)	(D)
West Texas B, total.....	44	(D)	(D)	81	(D)	(D)
Oil wells.....	15	48	0.4	58	273	2.9
Gas and gas condensate wells.....	7	(D)	(D)	1	(D)	(D)
Dry holes.....	22	69	0.3	22	67	0.3
Service wells.....	-	-	-	-	-	-
Texas Panhandle, total.....	58	207	1.2	177	786	4.3
Oil wells.....	42	152	0.9	76	306	2.3
Gas and gas condensate wells.....	5	13	0.1	53	269	0.8
Dry holes.....	6	32	0.1	42	197	1.2
Service wells.....	5	10	(Z)	6	14	0.1

See footnotes at end of table.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well—Continued

(See text under "Industry Description")

Geographic Area and type of well	1967			1963					
	Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments			Drilling for all establishments			Drilling for single-unit establishments with more than 4 employees and for all multi-unit establishments		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
Mountain Division, total.....	2,164	11,713	180.1	3,265	17,064	213.7	2,673	14,639	195.2
Oil wells.....	1,114	5,643	96.8	1,227	6,580	100.1	1,085	6,069	96.0
Gas and gas condensate wells.....	281	1,717	31.6	451	2,733	41.7	360	2,219	35.5
Dry holes.....	705	4,070	47.9	1,405	7,459	67.8	1,057	6,083	59.8
Service wells.....	64	280	3.8	182	292	4.0	171	268	3.9
Wyoming, total.....	638	3,368	50.2	903	4,470	54.7	832	4,257	52.6
Oil wells.....	348	1,567	27.1	337	1,533	23.7	313	1,488	23.3
Gas and gas condensate wells.....	37	257	5.7	62	375	8.1	56	(D)	(D)
Dry holes.....	220	1,444	16.1	422	2,464	21.6	386	2,353	20.9
Service wells.....	33	97	1.3	82	98	1.3	77	(D)	(D)
Colorado, total.....	258	1,396	19.8	567	2,839	19.7	405	2,110	16.5
Oil wells.....	102	582	11.3	99	515	5.3	83	455	4.9
Dry holes.....	119	622	4.7	373	1,856	9.5	246	278	7.4
New Mexico, total.....	774	4,325	68.6	1,233	6,586	93.1	997	5,623	84.5
Oil wells.....	424	2,234	35.5	602	3,240	49.2	527	2,960	47.0
Gas and gas condensate wells.....	194	1,212	21.0	258	1,712	25.3	199	1,356	20.9
Dry holes.....	146	841	11.1	316	1,539	17.4	219	1,225	15.4
Service wells.....	10	38	1.0	57	95	1.3	52	82	1.2
West New Mexico, total.....	243	1,198	16.3	456	2,201	27.2	310	1,607	21.6
Oil wells.....	39	96	1.6	111	372	4.6	103	358	4.5
Gas and gas condensate wells.....	166	965	12.9	219	1,407	18.9	166	1,083	14.9
Dry holes.....	38	137	1.8	119	413	3.6	34	157	2.2
Service wells.....	-	-	-	7	9	0.1	7	9	0.1
East New Mexico, total.....	521	3,089	50.9	777	4,385	65.9	687	4,016	62.9
Oil wells.....	385	2,138	33.8	491	2,868	44.5	424	2,602	42.5
Gas and gas condensate wells.....	28	247	8.1	39	305	6.4	33	273	6.0
Dry holes.....	108	704	9.0	197	1,126	13.8	185	1,068	13.2
Service wells.....	-	-	-	50	86	1.2	45	73	1.1
Pacific Division, total.....	2,586	7,823	332.1	2,748	9,274	169.3	2,482	8,305	160.3
Oil wells.....	2,142	5,168	223.0	2,060	5,704	108.5	1,902	5,190	103.3
Gas and gas condensate wells.....	68	461	11.9	135	824	17.2	126	765	16.3
Dry holes.....	285	1,924	90.0	541	2,717	43.2	442	2,321	40.3
Service wells.....	91	270	7.2	12	29	0.5	12	29	0.5

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit specified.

¹Data for offshore operations were collected with adjacent onshore reports for 1963. However, in 1967 data for offshore operations are excluded from the geographic area shown in this table and are only included in the total.

TABLE 6C. Comparability of 1963 Drilling Statistics to 1967 Drilling Statistics, by Geographic Area and Type of Well—Continued

(See text under "Industry Description")

Geographic Area and type of well	1963--Continued					
	Drilling for single-unit establishments with 1 to 4 employees			Drilling for single-unit establishments with no employees		
	Wells drilled (number)	Total footage drilled	Total cost (million dollars)	Wells drilled (number)	Total footage drilled	Total cost (million dollars)
Mountain Division, total.....	196	(D)	(D)	396	(D)	(D)
Oil wells.....	73	262	1.8	69	249	2.3
Gas and gas condensate wells.....	16	94	1.5	75	420	4.8
Dry holes.....	98	359	1.5	250	1,017	6.5
Service wells.....	9	(D)	(D)	2	(D)	(D)
Wyoming, total.....	24	121	1.4	47	92	0.7
Oil wells.....	1	(D)	(D)	23	(D)	(D)
Gas and gas condensate wells.....	5	(D)	(D)	1	(D)	(D)
Dry holes.....	13	62	0.4	23	49	0.3
Service wells.....	5	(D)	(D)	-	-	-
Colorado, total.....	59	(D)	(D)	103	(D)	(D)
Oil wells.....	10	43	0.3	6	17	0.1
Dry holes.....	46	189	0.4	81	389	1.7
New Mexico, total.....	73	(D)	(D)	163	(D)	(D)
Oil wells.....	50	182	1.2	25	98	0.9
Gas and gas condensate wells.....	6	32	0.4	53	324	4.0
Dry holes.....	14	34	0.1	83	280	1.8
Service wells.....	3	(D)	(D)	2	(D)	(D)
West New Mexico.....	19	(D)	(D)	127	(D)	(D)
Oil wells.....	7	(D)	(D)	1	(D)	(D)
Gas and gas condensate wells.....	-	-	-	53	324	4.0
Dry holes.....	12	(D)	(D)	73	(D)	(D)
Service wells.....	-	-	-	-	-	-
East New Mexico, total.....	54	217	1.6	35	149	1.4
Oil wells.....	43	(D)	(D)	23	(D)	(D)
Gas and gas condensate wells.....	6	32	0.4	-	-	-
Dry holes.....	2	(D)	(D)	10	(D)	(D)
Service wells.....	3	(D)	(D)	2	(D)	(D)
Pacific Division, total.....	99	327	3.3	157	642	5.7
Oil wells.....	43	120	1.6	115	394	3.6
Gas and gas condensate wells.....	5	31	0.5	4	28	0.4
Dry holes.....	51	176	1.2	48	220	1.7
Service wells.....	-	-	-	-	-	-

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, (million dollars)
PART I. EXPLORATION WELLS									
United States, total.....	1,552	7,737	120.3	541	4,021	119.1	4,563	26,309	415.1
Less than 2,500 feet.....	312	511	3.3	65	142	1.8	667	1,164	5.8
2,500 to 4,999 feet.....	655	2,403	18.3	118	426	4.7	1,705	6,277	34.7
5,000 to 9,999 feet.....	448	3,114	39.9	219	1,540	23.3	1,557	10,737	117.8
10,000 to 12,499 feet.....	84	927	26.5	63	683	19.1	333	3,708	83.5
12,500 feet and over.....	53	782	32.3	76	1,230	70.6	301	4,423	173.3
Offshore, United States.....	34	374	21.7	37	438	22.5	275	2,794	146.2
5,000 to 9,999 feet.....	14	127	5.4	11	84	2.8	118	916	39.1
10,000 to 12,499 feet.....	13	148	10.9	10	111	6.3	67	750	39.1
12,500 feet and over.....	7	99	5.4	16	243	13.4	76	1,079	65.1
Middle Atlantic Division.....	9	11	0.1	14	49	0.6	25	66	0.6
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	17	18	0.1
2,500 to 4,999 feet.....	(D)	(D)	(D)	11	37	0.4	(D)	(D)	(D)
East North Central Division.....	223	676	5.1	31	124	1.2	355	979	5.0
Less than 2,500 feet.....	71	113	0.7	(D)	(D)	(D)	146	263	1.0
2,500 to 4,999 feet.....	116	366	2.8	14	54	0.7	191	605	3.0
5,000 to 9,999 feet.....	36	197	1.6	(D)	(D)	(D)	(D)	(D)	(D)
West North Central Division.....	271	1,042	8.1	27	113	1.0	857	3,344	13.8
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	31	43	0.2
2,500 to 4,999 feet.....	242	895	6.3	17	69	0.6	721	2,620	9.4
5,000 to 9,999 feet.....	19	111	1.1	(D)	(D)	(D)	101	633	3.5
Kansas.....	252	1,190	6.8	27	113	1.0	775	2,854	11.1
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	31	43	0.2
2,500 to 4,999 feet.....	235	869	6.2	17	69	0.5	690	2,504	8.8
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	54	307	2.0
South Atlantic Division.....	20	48	0.5	31	120	1.6	38	168	2.9
2,500 to 4,999 feet.....	(D)	(D)	(D)	17	56	0.5	9	28	0.3
5,000 to 9,999 feet.....	-	-	-	7	38	0.5	9	67	1.0
East South Central Division.....	82	422	6.2	7	44	2.5	335	1,712	9.3
2,500 to 4,999 feet.....	22	90	0.5	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	17	115	1.1	(D)	(D)	(D)	164	1,058	2.9
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	11	120	1.0
12,500 feet and over.....	6	99	3.4	(D)	(D)	(D)	16	234	4.4
Kentucky.....	41	88	1.0	(D)	(D)	0.2	143	296	1.1
Mississippi.....	41	330	5.2	(D)	(D)	(D)	187	1,369	6.9
5,000 to 9,999 feet.....	16	107	0.8	-	-	-	161	1,040	2.6
10,000 to 12,499 feet.....	6	66	0.7	1	12	0.2	8	97	0.8
West South Central Division.....	782	4,550	78.9	382	3,297	100.4	2,261	15,682	268.5
Less than 2,500 feet.....	157	262	1.3	42	97	1.4	293	515	2.3
2,500 to 4,999 feet.....	214	822	6.0	52	185	1.9	560	2,170	13.2
5,000 to 9,999 feet.....	316	2,271	29.3	182	1,279	16.3	896	6,388	70.8
10,000 to 12,499 feet.....	55	614	17.8	57	616	17.3	263	2,931	56.1
12,500 feet and over.....	40	581	24.5	69	1,120	63.5	249	3,678	126.1
Offshore, West South Central Division..	31	346	18.4	34	408	20.2	237	2,433	100.6
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	97	772	27.2
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	57	632	24.6
12,500 feet and over.....	7	99	5.4	16	243	13.4	69	980	45.8
Arkansas.....	(D)	(D)	(D)	(D)	(D)	(D)	18	95	1.7
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	7	43	0.4

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967—Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping (million dollars)
PART I. EXPLORATION WELLS--Continued									
West South Central Division--Continued									
Louisiana.....	104	1,016	38.5	128	1,186	47.6	599	5,895	159.5
Less than 2,500 feet.....	11	19	0.2	(D)	(D)	(D)	(D)	(D)	(D)
2,500 to 4,999 feet.....	9	35	0.7	(D)	(D)	(D)	48	(D)	3.1
5,000 to 9,999 feet.....	33	285	6.6	23	169	3.1	244	1,772	32.2
10,000 to 12,499 feet.....	24	274	12.0	24	247	8.7	129	1,453	32.3
12,500 feet and over.....	27	403	19.0	42	659	34.6	166	2,462	91.4
North Louisiana.....	24	128	2.0	42	166	1.9	124	763	4.6
5,000 to 9,999 feet.....	9	(D)	(D)	(D)	(D)	(D)	84	572	3.0
10,000 to 12,499 feet.....	-	-	-	(D)	(D)	(D)	7	73	1.0
South Louisiana.....	51	558	19.3	56	657	28.6	260	2,881	63.6
5,000 to 9,999 feet.....	13	110	1.6	6	47	0.8	72	503	5.7
10,000 to 12,499 feet.....	13	149	4.2	15	146	4.4	73	828	10.9
12,500 feet and over.....	18	275	12.9	27	430	22.4	97	1,483	45.9
Offshore Louisiana.....	(D)	(D)	(D)	30	363	17.7	215	2,251	91.4
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	88	697	23.6
10,000 to 12,499 feet.....	11	125	7.8	(D)	(D)	(D)	49	552	20.4
12,500 feet and over.....	7	99	5.4	(D)	(D)	(D)	(D)	(D)	(D)
Oklahoma.....	196	1,116	12.6	(D)	(D)	(D)	355	1,916	18.4
Less than 2,500 feet.....	24	44	0.3	(D)	(D)	(D)	42	79	0.4
2,500 to 4,999 feet.....	63	236	1.6	(D)	(D)	(D)	137	500	2.7
5,000 to 9,999 feet.....	105	786	9.4	(D)	(D)	(D)	161	1,124	8.9
Texas.....	480	2,407	27.7	167	1,401	44.1	1,289	7,775	88.9
Less than 2,500 feet.....	122	199	0.8	14	24	0.2	235	409	1.5
2,500 to 4,999 feet.....	142	551	3.7	22	87	0.9	370	1,463	7.3
5,000 to 9,999 feet.....	176	1,189	13.2	76	526	7.6	484	3,449	29.3
10,000 to 12,499 feet.....	29	318	5.5	29	322	7.7	127	1,399	22.7
12,500 feet and over.....	11	150	4.5	26	442	27.7	73	1,055	28.1
Texas Gulf Coast A.....	27	189	2.6	19	206	5.9	159	1,290	16.9
Less than 2,500 feet.....	(D)	(D)	(D)	-	-	-	10	16	0.2
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	26	85	0.7
5,000 to 9,999 feet.....	16	127	1.7	(D)	(D)	(D)	66	497	4.1
10,000 to 12,499 feet.....	5	53	0.8	5	57	1.0	37	386	4.5
12,500 feet and over.....	-	-	-	6	99	4.3	20	306	7.4
Texas Gulf Coast B.....	19	125	1.3	18	134	1.9	52	419	3.9
Less than 2,500 feet.....	-	-	-	-	-	-	-	-	-
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	5	18	(Z)
5,000 to 9,999 feet.....	15	104	1.0	(D)	(D)	(D)	35	265	1.2
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	9	97	1.7
12,500 feet and over.....	-	-	-	(D)	(D)	(D)	3	39	0.8
South Texas.....	28	198	2.9	39	364	9.9	176	1,215	16.0
Less than 2,500 feet.....	(D)	(D)	(D)	-	-	-	18	33	0.3
2,500 to 4,999 feet.....	7	33	0.3	(D)	(D)	(D)	37	160	0.7
5,000 to 9,999 feet.....	17	137	1.5	(D)	(D)	(D)	95	670	4.6
10,000 to 12,499 feet.....	(D)	(D)	(D)	9	100	2.6	10	112	3.2
12,500 feet and over.....	(D)	(D)	(D)	(D)	(D)	(D)	16	240	7.3
Southwest Texas.....	(D)	(D)	(D)	4	31	0.7	61	287	5.0
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	25	41	0.1
2,500 to 4,999 feet.....	(D)	(D)	(D)	-	-	-	12	43	0.2
12,500 feet and over.....	-	-	-	-	-	-	4	59	3.0
North Central Texas A.....	169	583	3.7	27	141	1.7	246	924	4.1
Less than 2,500 feet.....	77	120	0.4	(D)	(D)	(D)	(D)	(D)	(D)
2,500 to 4,999 feet.....	53	229	1.2	(D)	(D)	(D)	88	336	1.2
5,000 to 9,999 feet.....	39	234	2.1	16	98	1.4	65	425	2.1
North Central Texas B.....	41	160	1.1	4	16	0.1	170	581	2.3
Less than 2,500 feet.....	10	14	0.1	(D)	(D)	(D)	67	127	0.4
2,500 to 4,999 feet.....	25	112	0.7	(D)	(D)	(D)	87	361	1.2
5,000 to 9,999 feet.....	6	34	0.4	-	-	-	16	93	0.7
10,000 to 12,499 feet.....	-	-	-	-	-	-	-	-	-
12,500 feet and over.....	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967--Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping (million dollars)
PART I. EXPLORATION WELLS--Continued									
West South Central Division--Continued									
Texas--Continued									
East Texas A.....	7	31	0.3	6	75	1.4	52	339	3.9
Less than 2,500 feet.....	(D)	(D)	(D)	-	-	-	12	17	(Z)
2,500 to 4,999 feet.....	-	-	-	-	-	-	19	86	0.3
5,000 to 9,999 feet.....	(D)	(D)	(D)	-	-	-	6	49	0.5
10,000 to 12,499 feet.....	-	-	-	(D)	(D)	(D)	9	103	1.5
12,500 feet and over.....	-	-	-	(D)	(D)	(D)	6	84	1.5
East Texas B.....	27	160	1.8	18	116	1.6	58	449	4.4
5,000 to 9,999 feet.....	16	110	1.3	14	96	1.3	26	191	1.5
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	12	143	1.5
12,500 feet and over.....	(D)	(D)	(D)	-	-	-	4	56	1.0
West Texas A.....	90	621	9.3	18	179	13.7	212	1,539	17.8
Less than 2,500 feet.....	9	21	0.2	(D)	(D)	(D)	7	14	0.1
2,500 to 4,999 feet.....	18	65	0.8	(D)	(D)	(D)	50	185	1.4
5,000 to 9,999 feet.....	39	246	2.1	(D)	(D)	(D)	110	781	6.8
10,000 to 12,499 feet.....	16	178	2.8	(D)	(D)	(D)	31	346	4.7
12,500 feet and over.....	8	111	3.3	7	144	12.8	14	213	4.9
West Texas B.....	32	201	2.1	6	48	1.8	62	374	3.0
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	29	126	0.9
5,000 to 9,999 feet.....	17	116	1.1	(D)	(D)	(D)	21	147	1.2
10,000 to 12,499 feet.....	3	35	0.5	-	-	-	7	80	0.8
Texas Panhandle.....	13	79	1.4	4	46	2.7	20	176	2.6
5,000 to 9,999 feet.....	5	39	0.5	(D)	(D)	(D)	(D)	(D)	(D)
Offshore Texas.....	(D)	(D)	(D)	4	45	2.5	21	182	9.2
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	9	75	3.6
10,000 to 12,499 feet.....	-	-	-	(D)	(D)	(D)	8	85	4.3
Mountain Division.....	123	781	13.6	29	236	7.6	498	2,875	34.7
Less than 2,500 feet.....	6	111	(D)	(D)	(D)	(D)	54	100	1.3
2,500 to 4,999 feet.....	50	195	2.3	(D)	(D)	(D)	141	563	5.2
5,000 to 9,999 feet.....	45	321	4.3	16	109	1.9	265	1,766	16.1
10,000 to 12,499 feet.....	16	169	3.0	(D)	(D)	(D)	30	329	6.6
12,500 feet and over.....	(D)	(D)	(D)	(D)	(D)	(D)	8	117	5.5
Montana.....	18	111	1.8	(D)	(D)	(D)	131	685	4.4
2,500 to 4,999 feet.....	7	27	0.3	(D)	(D)	(D)	31	117	0.9
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	78	506	2.9
Wyoming.....	17	125	2.0	(D)	(D)	(D)	135	44	11.0
2,500 to 4,999 feet.....	(D)	(D)	(D)	-	-	-	15	54	0.5
5,000 to 9,999 feet.....	13	97	1.5	(D)	(D)	(D)	99	714	6.2
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	12	135	2.6
Colorado.....	11	68	2.2	(D)	(D)	(D)	89	452	3.3
2,500 to 4,999 feet.....	(D)	(D)	(D)	-	-	-	43	184	1.1
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	44	255	2.0
New Mexico.....	54	396	6.3	17	168	6.1	95	512	7.0
Less than 2,500 feet.....	4	6	(Z)	-	-	-	20	36	0.2
2,500 to 4,999 feet.....	26	117	1.4	(D)	(D)	(D)	42	165	1.6
5,000 to 9,999 feet.....	13	109	1.2	9	63	1.1	18	136	1.7
10,000 to 12,499 feet.....	12	127	1.8	(D)	(D)	(D)	11	118	1.5
12,500 feet and over.....	4	56	1.9	5	79	4.4	4	57	2.0
West New Mexico.....	4	14	0.3	(D)	(D)	(D)	27	99	1.5
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	3	21	0.4
East New Mexico.....	50	382	6.0	(D)	(D)	(D)	68	413	5.6
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	15	115	1.4
10,000 to 12,499 feet.....	12	127	1.8	(D)	(D)	(D)	(D)	(D)	(D)
12,500 feet and over.....	4	56	1.9	5	79	4.4	(D)	(D)	(D)

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967—Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping (million dollars)
PART I. EXPLORATION WELLS--Continued									
Pacific Division.....	41	207	7.8	20	138	4.2	194	1,483	80.0
2,500 to 4,999 feet.....	5	16	0.2	(D)	(D)	(D)	36	156	3.0
5,000 to 9,999 feet.....	15	99	2.5	14	102	3.5	100	690	22.4
10,000 to 12,499 feet.....	5	56	4.4	(D)	(D)	(D)	25	281	18.8
12,500 feet and over.....	(D)	(D)	(D)	-	-	-	24	342	35.6
California.....	(D)	(D)	(D)	(D)	(D)	(D)	161	1,129	27.9
2,500 to 4,999 feet.....	5	16	0.2	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	15	99	2.5	11	75	1.4	91	633	14.8
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	14	157	3.2
12,500 feet and over.....	(D)	(D)	(D)	-	-	-	12	173	7.3
North California.....	(D)	(D)	(D)	(D)	(D)	(D)	50	326	4.3
5,000 to 9,999 feet.....	(D)	(D)	(D)	8	56	1.0	40	266	3.4
East Central California.....	30	107	2.2	4	17	0.1	64	423	7.9
Less than 2,500 feet.....	15	19	0.2	-	-	-	7	11	0.1
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	22	91	1.6
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	22	152	2.2
10,000 to 12,499 feet.....	(D)	(D)	(D)	-	-	-	5	56	0.7
12,500 feet and over.....	-	-	-	-	-	-	8	113	3.3
South California.....	(D)	(D)	(D)	(D)	(D)	(D)	22	167	2.8
2,500 to 4,999 feet.....	-	-	-	-	-	-	5	29	0.5
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	10	75	1.2
Alaska 12,500 feet and over.....	-	-	-	-	-	-	12	169	28.3
Offshore Alaska 12,500 feet and over...	-	-	-	-	-	-	5	72	16.6
PART II. DEVELOPMENT WELLS									
United States, total.....	9,282	40,248	722.6	2,030	13,898	322.1	2,085	11,955	163.2
Less than 2,500 feet.....	3,338	4,792	48.7	201	403	4.5	375	617	4.0
2,500 to 4,999 feet.....	2,746	10,109	134.2	607	2,236	27.7	690	2,483	15.2
5,000 to 9,999 feet.....	2,611	18,358	291.9	821	6,013	88.8	729	5,257	56.4
10,000 to 12,499 feet.....	425	4,709	159.3	224	2,468	69.4	175	1,941	39.9
12,500 feet or more.....	162	2,280	88.3	177	2,778	131.7	116	1,657	47.7
Offshore, United States.....	697	5,814	294.6	143	1,597	80.8	149	1,510	47.9
2,500 to 4,999 feet.....	190	713	36.4	-	-	-	-	-	-
5,000 to 9,999 feet.....	221	1,718	86.6	50	421	15.4	68	564	15.6
10,000 to 12,499 feet.....	208	2,326	116.2	44	482	20.6	52	580	18.8
12,500 feet and over.....	(D)	(D)	(D)	49	694	44.8	25	350	12.9
Middle Atlantic Division.....	268	388	1.9	144	544	5.8	22	59	0.5
Less than 2,500 feet.....	(D)	(D)	(D)	7	14	0.1	(D)	(D)	(D)
2,500 to 4,999 feet.....	(D)	(D)	(D)	125	444	4.8	(D)	(D)	(D)
5,000 to 9,999 feet.....	-	-	-	12	86	0.9	-	-	-
East North Central Division.....	577	1,762	13.8	68	247	2.3	173	449	1.9
Less than 2,500 feet.....	174	253	2.5	(D)	(D)	(D)	(D)	(D)	(D)
2,500 to 4,999 feet.....	318	1,058	7.9	47	179	1.7	84	270	1.2
5,000 to 9,999 feet.....	85	451	3.4	(D)	(D)	(D)	(D)	(D)	(D)
West North Central Division.....	593	2,050	17.4	73	282	2.3	245	908	4.6
Less than 2,500 feet.....	160	259	1.7	9	10	0.1	(D)	(D)	(D)
5,000 to 9,999 feet.....	78	534	6.4	23	129	1.3	27	171	1.4
Kansas.....	530	1,604	11.8	59	231	2.1	231	807	3.8
Less than 2,500 feet.....	160	259	1.7	9	10	0.1	(D)	(D)	(D)
South Atlantic Division.....	78	182	2.0	217	822	12.0	27	94	0.9
Less than 2,500 feet.....	71	154	1.5	48	99	1.1	(D)	(D)	(D)
2,500 to 4,999 feet.....	(D)	(D)	(D)	142	558	8.6	14	56	0.5
5,000 to 9,999 feet.....	-	-	-	27	165	2.3	(D)	(D)	(D)

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967—Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping (million dollars)
PART II. DEVELOPMENT WELLS--Continued									
East South Central Division.....	237	1,140	14.2	98	360	4.4	101	498	4.4
Less than 2,500 feet.....	110	135	1.3	(D)	(D)	(D)	(D)	(D)	(D)
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	29	94	0.8
5,000 to 9,999 feet.....	76	512	3.6	(D)	(D)	(D)	27	193	0.9
12,500 feet and over.....	19	278	6.3	(D)	(D)	(D)	7	100	1.9
Kentucky.....	126	180	1.7	(D)	(D)	(D)	68	133	1.0
Less than 2,500 feet.....	(D)	(D)	(D)	24	41	0.4	33	52	0.3
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	25	81	0.7
Mississippi.....	111	960	12.5	(D)	(D)	(D)	43	365	3.3
2,500 to 4,999 feet.....	(D)	(D)	(D)	-	-	-	4	13	0.1
5,000 to 9,999 feet.....	76	512	3.6	(D)	(D)	(D)	27	193	0.9
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	5	59	0.5
12,500 feet and over.....	19	278	6.3	3	52	0.9	7	100	1.9
West South Central Division.....	4,449	24,961	422.5	1,135	9,959	265.3	1,250	8,456	129.3
Less than 2,500 feet.....	900	1,459	10.8	78	176	2.1	159	282	1.9
2,500 to 4,999 feet.....	1,216	4,582	44.6	113	447	4.8	300	1,093	7.2
5,000 to 9,999 feet.....	1,871	13,411	190.9	561	4,216	64.7	540	3,960	43.7
10,000 to 12,499 feet.....	334	3,721	109.7	213	2,351	65.8	151	1,676	33.4
12,500 feet and over.....	128	1,788	66.4	170	2,669	128.0	101	1,445	43.2
Offshore, West South Central Division..	401	4,277	175.4	143	1,597	80.8	(D)	(D)	(D)
5,000 to 9,999 feet.....	137	1,160	48.9	50	421	15.4	(D)	(D)	(D)
10,000 to 12,499 feet.....	186	2,085	79.7	44	482	20.6	(D)	(D)	(D)
12,500 feet and over.....	(D)	(D)	(D)	49	694	44.8	25	350	12.9
Arkansas.....	41	134	1.2	(D)	(D)	(D)	45	207	1.6
Less than 2,500 feet.....	10	21	0.1	-	-	-	-	-	-
2,500 to 4,999 feet.....	20	62	0.5	(D)	(D)	(D)	30	109	0.7
5,000 to 9,999 feet.....	11	51	0.6	47	306	4.9	15	98	1.0
Louisiana.....	1,071	8,335	244.7	309	3,194	120.3	430	3,659	73.8
Less than 2,500 feet.....	138	144	0.8	41	103	1.2	20	49	0.7
2,500 to 4,999 feet.....	152	529	7.1	19	52	0.5	93	330	1.9
5,000 to 9,999 feet.....	403	3,115	79.8	55	458	11.4	142	1,073	16.8
10,000 to 12,499 feet.....	260	2,900	94.5	84	935	30.6	101	1,123	23.2
12,500 feet and over.....	118	1,647	62.5	110	1,646	76.6	74	1,084	31.3
North Louisiana.....	253	657	6.6	72	294	5.5	125	582	2.9
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	15	31	0.2
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	65	236	0.5
5,000 to 9,999 feet.....	(D)	(D)	(D)	8	72	1.4	42	282	1.6
10,000 to 12,499 feet.....	(D)	(D)	(D)	8	86	3.1	(D)	(D)	(D)
South Louisiana.....	423	3,452	67.3	125	1,607	46.2	189	1,862	35.1
5,000 to 9,999 feet.....	229	1,732	30.4	20	171	2.6	58	438	5.6
10,000 to 12,499 feet.....	(D)	(D)	(D)	38	431	8.9	54	601	9.0
12,500 feet and over.....	(D)	(D)	(D)	64	986	33.9	49	736	19.4
Offshore Louisiana.....	388	4,158	170.8	111	1,293	68.5	116	1,215	35.8
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	44	366	10.0
Oklahoma.....	777	3,661	36.9	257	1,981	27.0	245	1,507	15.7
Less than 2,500 feet.....	208	280	2.0	6	18	0.2	35	71	0.4
2,500 to 4,999 feet.....	229	808	7.7	19	72	0.7	52	183	1.2
5,000 to 9,999 feet.....	326	2,422	24.1	193	1.5	18.0	140	1,039	9.9
10,000 to 12,499 feet.....	(D)	(D)	(D)	38	406	7.7	13	142	2.4
12,500 feet and over.....	(D)	(D)	(D)	(D)	(D)	(D)	5	72	1.8
Texas.....	2,563	12,968	139.4	510	4,326	112.2	545	3,172	38.3
Less than 2,500 feet.....	544	1,134	7.9	31	55	0.7	102	162	0.8
2,500 to 4,999 feet.....	815	3,183	29.3	63	273	2.7	128	484	3.4
5,000 to 9,999 feet.....	1,134	7,840	86.4	266	1,981	30.4	256	1,826	16.2
10,000 to 12,499 feet.....	(D)	(D)	(D)	91	1,010	27.5	37	411	7.8
12,500 feet and over.....	(D)	(D)	(D)	59	1,009	51.0	22	289	10.1

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967--Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled (1,000)	Cost of drilling and equipping (million dollars)
PART II. DEVELOPMENT WELLS--Continued									
West South Central Division--Continued									
Texas--Continued									
Texas Gulf Coast A.....	272	1,419	16.1	64	474	7.4	76	428	4.4
Less than 2,500 feet.....	26	30	0.3	(D)	(D)	(D)	13	14	0.1
2,500 to 4,999 feet.....	86	303	3.2	13	48	0.5	21	84	0.8
5,000 to 9,999 feet.....	156	1,043	11.8	36	265	3.8	35	250	2.1
10,000 to 12,499 feet.....	4	43	0.8	12	131	2.1	7	80	1.3
Texas Gulf Coast B.....	73	437	4.8	46	375	6.7	39	274	2.5
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	5	21	0.1
5,000 to 9,999 feet.....	62	394	4.6	30	237	3.5	30	207	1.3
10,000 to 12,499 feet.....	-	-	-	10	103	2.4	(D)	(D)	(D)
South Texas.....	192	1,137	10.9	106	890	22.1	49	358	4.6
Less than 2,500 feet.....	27	60	0.5	(D)	(D)	(D)	3	4	(Z)
2,500 to 4,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	4	16	0.1
5,000 to 9,999 feet.....	152	1,018	9.5	54	379	5.1	33	230	1.4
10,000 to 12,499 feet.....	(D)	(D)	(D)	31	352	11.0	6	67	1.3
12,500 feet and over.....	-	-	-	8	114	5.6	3	41	1.7
Southwest Texas.....	132	343	3.0	14	72	1.1	25	77	0.4
Less than 2,500 feet.....	76	149	1.3	(D)	(D)	(D)	13	15	0.1
2,500 to 4,999 feet.....	50	151	1.3	(D)	(D)	(D)	6	18	0.1
5,000 to 9,999 feet.....	6	43	0.4	(D)	(D)	(D)	6	44	0.3
North Central Texas A.....	363	1,202	8.5	42	246	1.7	83	270	1.2
Less than 2,500 feet.....	187	330	1.6	(D)	(D)	(D)	38	69	0.2
2,500 to 4,999 feet.....	89	339	2.5	(D)	(D)	(D)	26	86	0.4
5,000 to 9,999 feet.....	87	533	4.4	34	214	1.5	19	115	0.6
North Central Texas B.....	201	739	5.0	9	22	0.2	34	124	0.7
Less than 2,500 feet.....	75	124	0.6	5	8	0.1	10	18	0.1
2,500 to 4,999 feet.....	113	533	3.2	4	14	0.1	19	76	0.5
5,000 to 9,999 feet.....	(D)	(D)	(D)	-	-	-	5	30	0.1
East Texas A.....	24	106	1.0	15	141	2.6	23	126	1.1
Less than 2,500 feet.....	4	2	(Z)	-	-	-	(D)	(D)	(D)
2,500 to 4,999 feet.....	14	59	0.3	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	6	45	0.6	8	69	1.2	11	84	0.8
10,000 to 12,499 feet.....	-	-	-	4	45	1.0	-	-	-
East Texas B.....	79	387	3.5	27	201	3.2	33	190	1.6
Less than 2,500 feet.....	11	21	0.1	(D)	(D)	(D)	3	4	(Z)
2,500 to 4,999 feet.....	32	131	1.1	(D)	(D)	(D)	9	34	0.2
5,000 to 9,999 feet.....	36	235	2.3	16	128	1.7	18	121	0.9
10,000 to 12,499 feet.....	-	-	-	4	44	1.1	3	31	0.5
West Texas A.....	781	3,986	48.2	59	851	41.6	79	539	8.6
Less than 2,500 feet.....	(D)	(D)	(D)	-	-	-	7	16	0.2
2,500 to 4,999 feet.....	351	1,360	14.6	12	74	0.5	22	78	0.8
5,000 to 9,999 feet.....	264	1,876	20.9	5	32	0.6	39	290	2.7
10,000 to 12,499 feet.....	33	377	7.0	8	89	4.3	5	56	0.9
12,500 feet and over.....	(D)	(D)	(D)	34	656	36.2	6	99	4.0
West Texas B.....	301	2,174	24.5	37	326	6.2	28	209	2.8
2,500 to 4,999 feet.....	27	125	1.5	-	-	-	(D)	(D)	(D)
5,000 to 9,999 feet.....	249	1,830	19.5	28	198	2.4	13	103	0.9
10,000 to 12,499 feet.....	16	175	2.9	(D)	(D)	(D)	4	43	0.6
Texas Panhandle.....	129	782	9.3	59	426	7.2	35	251	3.4
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	5	9	0.1
2,500 to 4,999 feet.....	32	103	1.1	9	32	0.4	7	23	0.1
5,000 to 9,999 feet.....	91	649	7.7	28	221	2.2	14	108	1.1
10,000 to 12,499 feet.....	(D)	(D)	(D)	12	135	2.7	4	47	0.6
12,500 feet and over.....	-	-	-	(D)	(D)	(D)	5	64	1.4
Offshore Texas.....	(D)	(D)	(D)	32	304	12.3	26	237	6.9
5,000 to 9,999 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	20	168	3.8

See footnotes at end of table.

TABLE 6D. Drilling Statistics for Exploration and Development Wells as Reported by Operators, by Type of Well, Geographic Area, and Depth Range: 1967--Continued

(Represents holes drilled and completed during the year by operators (except single unit establishments with less than 5 employees) of oil and gas field properties covered in the census in the crude petroleum and natural gas industry and in the oil and gas field services industries)

Geographic area and depth range	Oil wells			Gas and gas condensates wells			Dry holes		
	Number of wells	Total footage drilled	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled	Cost of drilling and equipping, excluding cost beyond the Christmas tree (million dollars)	Number of wells	Total footage drilled	Cost of drilling and equipping (million dollars)
	PART II. DEVELOPMENT WELLS--Continued								
Mountain Division.....	985	4,831	69.1	250	1,466	22.5	185	1,096	12.1
Less than 2,500 feet.....	(D)	(D)	(D)	24	46	0.5	22	21	0.3
2,500 to 4,999 feet.....	466	1,804	21.8	61	197	3.7	54	204	1.6
5,000 to 9,999 feet.....	323	2,176	31.6	156	1,120	15.4	87	610	6.0
10,000 to 12,499 feet.....	44	476	7.6	(D)	(D)	(D)	14	149	1.6
12,500 feet and over.....	(D)	(D)	(D)	(D)	(D)	(D)	8	112	2.6
Montana.....	156	819	9.2	(D)	(D)	(D)	22	114	0.9
2,500 to 4,999 feet.....	121	541	4.7	(D)	(D)	(D)	(D)	(D)	(D)
Wyoming.....	331	1,442	21.5	(D)	(D)	(D)	71	410	4.1
Less than 2,500 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2,500 to 4,999 feet.....	92	322	4.4	8	28	0.9	20	72	0.4
5,000 to 9,999 feet.....	127	825	12.2	19	138	2.0	31	224	2.0
10,000 to 12,499 feet.....	(D)	(D)	(D)	(D)	(D)	(D)	6	62	0.7
12,500 feet and over.....	(D)	(D)	(D)	-	-	-	(D)	(D)	(D)
Colorado.....	90	509	7.0	31	154	3.0	26	150	1.3
2,500 to 4,999 feet.....	22	96	1.4	(D)	(D)	(D)	11	48	0.3
5,000 to 9,999 feet.....	68	413	5.6	(D)	(D)	(D)	15	102	1.1
New Mexico.....	364	1,812	24.3	178	1,054	14.6	52	351	4.3
2,500 to 4,999 feet.....	212	769	9.6	32	97	1.7	(D)	(D)	(D)
5,000 to 9,999 feet.....	73	560	7.7	120	870	11.0	21	161	1.8
10,000 to 12,499 feet.....	35	378	5.4	-	-	-	8	87	1.0
12,500 feet and over.....	(D)	(D)	(D)	(D)	(D)	(D)	4	50	0.9
West New Mexico.....	35	83	1.2	163	953	12.3	11	38	0.4
5,000 to 9,999 feet.....	5	34	0.6	114	827	10.4	(D)	(D)	(D)
East New Mexico.....	329	1,729	23.1	15	101	2.3	41	313	3.9
5,000 to 9,999 feet.....	68	526	7.1	6	43	0.6	17	134	1.5
10,000 to 12,499 feet.....	35	378	5.4	-	-	-	8	87	1.0
Pacific Division.....	2,095	4,934	181.7	45	318	7.3	82	395	9.3
Less than 2,500 feet.....	1,514	1,932	26.8	-	-	-	31	49	0.4
2,500 to 4,999 feet.....	367	1,339	49.9	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	178	1,274	56.0	29	218	3.5	(D)	(D)	(D)
10,000 to 12,499 feet.....	(D)	(D)	(D)	4	43	2.1	4	45	4.2
Offshore, Pacific Division.....	296	1,537	119.2	-	-	-	(D)	(D)	(D)
5,000 to 9,999 feet.....	84	558	37.7	-	-	-	(D)	(D)	(D)
10,000 to 12,499 feet.....	22	241	36.5	-	-	-	(D)	(D)	(D)
California.....	2,056	4,544	119.5	(D)	(D)	(D)	(D)	(D)	(D)
Less than 2,500 feet.....	1,514	1,932	26.8	-	-	-	31	49	0.4
2,500 to 4,999 feet.....	367	1,339	49.9	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	163	1,151	39.0	29	218	3.5	(D)	(D)	(D)
North California.....	3	13	0.2	34	250	4.3	15	91	0.9
East Central California.....	1,490	2,305	34.3	(D)	(D)	(D)	51	214	2.1
Less than 2,500 feet.....	1,392	1,729	23.1	-	-	-	(D)	(D)	(D)
5,000 to 9,999 feet.....	42	357	7.9	-	-	-	(D)	(D)	(D)
Central Coastal California.....	118	384	8.5	(D)	(D)	(D)	4	9	0.1
2,500 to 4,999 feet.....	34	122	3.3	(D)	(D)	(D)	(D)	(D)	(D)
5,000 to 9,999 feet.....	17	114	2.8	-	-	-	-	-	-
South California.....	194	711	19.5	(D)	(D)	(D)	(D)	(D)	(D)
Less than 2,500 feet.....	61	80	1.7	-	-	-	(D)	(D)	(D)
2,500 to 4,999 feet.....	93	335	8.6	-	-	-	-	-	-
Offshore California, 5,000 to 9,999 ft.	69	435	20.7	-	-	-	(D)	(D)	(D)
Alaska, 5,000 to 9,999 feet.....	15	123	17.0	-	-	-	-	-	-
Offshore Alaska, 5,000 to 9,999 feet...	15	123	17.0	-	-	-	-	-	-
	PART III. UNDISTRIBUTED BY EXPLORATION OR DEVELOPMENT OR BY DEPTH PAGE ²								
United States.....	199	885	6.9	107	280	2.3	219	611	2.2

Standard notes: -Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

¹Figures exclude data for single-unit establishments with less than 5 employees.

²The figures shown for undistributed by exploration or development or by depth range were obtained by subtracting the exploration and development figures of table 6D from table 6B figures. These differences are mainly the result of respondents that reported the inquiry used for tabulating table 6B but did not report the inquiry used for tabulating table 6D. Other factors effecting difference figures were a small number of respondents that reported the inquiry for tabulating table 6D but did not report the inquiry used to tabulate table 6B or that reported well type inconsistently between both inquiries and that were not entirely reconciled or minor imbalances due to independent rounding or editing of individual establishment and tabulated figures.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Geographic area and type of operation	Supplies used and purchased machinery installed						
	Total	Purchased machinery installed	Steel mill shapes and forms ¹		All other supplies ²	Undistributed supplies used and purchased machinery installed ³	
			Quantity	Cost			
			(million dollars)	(million dollars)			(1,000 short tons)
INDUSTRY 1311. --CRUDE PETROLEUM AND NATURAL GAS							
United States, total.....	1967..	1,633.4	490.0	1,796.0	477.4	577.3	88.7
	1963..	1,457.6	421.3	1,431.4	362.0	532.3	142.0
Crude petroleum.....	1967..	1,339.6	401.8	1,502.1	391.8	477.4	68.6
	1963..	1,274.3	371.3	1,262.3	318.8	458.5	125.7
Natural gas.....	1967..	293.9	88.2	293.9	85.6	99.9	20.1
	1963..	183.3	50.0	169.1	43.2	73.7	16.4
Northeast region, total.....	1967..	7.8	1.2	13.5	2.7	2.3	1.6
	1963..	9.1	3.6	5.3	1.3	2.2	2.0
Crude petroleum.....	1967..	3.5	0.8	7.4	1.1	0.3	1.3
	1963..	3.3	0.7	1.8	0.5	1.2	1.0
Natural gas.....	1967..	4.4	0.4	6.1	1.6	2.0	0.4
	1963..	5.8	3.0	3.5	0.8	1.0	1.0
East North Central Division.....	1967..	39.8	0.4	33.4	9.7	14.0	15.7
	1963..	44.6	16.2	23.0	5.8	11.5	11.1
Crude petroleum.....	1967..	36.7	-	29.0	8.5	13.6	14.6
	1963..	42.2	15.6	22.1	5.6	10.6	10.5
Natural gas.....	1967..	3.0	0.4	4.4	1.2	0.4	1.0
	1963..	2.5	0.7	1.0	0.2	1.0	0.6
Illinois.....	1967..	23.3	5.4	16.4	4.8	10.3	2.8
	1963..	25.6	10.8	10.7	2.7	7.1	4.9
West North Central Division.....	1967..	63.1	21.4	55.7	15.8	22.4	3.5
	1963..	70.0	24.9	51.6	13.5	22.7	8.9
Crude petroleum.....	1967..	55.8	16.4	54.0	15.3	20.8	3.3
	1963..	64.6	22.8	49.5	13.0	20.9	7.9
Natural gas.....	1967..	7.3	5.0	1.7	0.5	1.6	0.2
	1963..	5.3	2.1	2.1	0.5	1.8	1.0
North Dakota.....	1967..	14.6	5.3	13.5	4.1	5.2	-
	1963..	10.4	4.6	9.8	2.7	3.0	0.1
Kansas.....	1967..	44.4	15.3	39.4	11.0	14.7	3.4
	1963..	52.8	18.4	35.9	9.5	17.4	7.6
South Atlantic Division.....	1967..	14.2	3.7	20.9	5.8	3.4	1.3
	1963..	14.5	4.6	8.0	2.7	5.5	1.6
Crude petroleum.....	1967..	4.7	1.0	3.2	1.2	1.9	0.6
	1963..	5.1	1.3	3.5	0.9	2.9	-
Natural gas.....	1967..	9.5	2.7	17.7	4.6	1.5	0.7
	1963..	9.4	3.3	4.6	1.8	2.7	1.6
East South Central Division.....	1967..	34.7	10.8	38.1	10.0	12.0	1.9
	1963..	39.6	12.1	29.0	7.7	12.7	7.0
Crude petroleum.....	1967..	29.7	9.4	32.7	8.6	10.0	1.7
	1963..	36.5	11.0	28.1	7.5	12.6	5.5
Natural gas.....	1967..	5.0	1.4	5.4	1.4	1.6	0.6
	1963..	3.0	1.1	1.0	0.2	0.2	1.5
Kentucky.....	1967..	7.7	1.9	6.8	1.7	2.5	1.6
	1963..	12.4	4.8	5.7	1.5	2.4	3.6
Mississippi.....	1967..	26.4	8.8	30.2	7.9	9.0	0.7
	1963..	25.0	7.0	20.4	5.4	9.2	3.5
West South Central Division.....	1967..	1,086.1	300.3	1,341.8	341.2	393.8	50.8
	1963..	993.7	275.6	1,072.3	275.8	373.6	68.7
Crude petroleum.....	1967..	861.2	237.2	1,108.7	273.6	314.8	35.6
	1963..	862.0	243.0	934.7	241.3	317.3	60.4
Natural gas.....	1967..	224.9	63.1	233.1	67.6	79.0	15.2
	1963..	131.7	32.6	137.6	34.5	56.3	8.3

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Geographic area and type of operation		Supplies used and purchased machinery installed						
		Total	Purchased machinery installed	Steel mill shapes and forms ¹		All other supplies ²	Undistributed supplies used and purchased machinery installed ³	
				Quantity	Cost			
				(million dollars)	(million dollars)			(1,000 short tons)
INDUSTRY 1311. --CRUDE PETROLEUM AND NATURAL GAS--Continued								
West South Central Division--Continued								
Arkansas.....		1967..	7.0	2.5	6.7	1.7	2.0	0.8
		1963..	10.8	3.3	5.4	1.5	3.8	2.2
Crude petroleum.....		1967..	5.2	2.0	3.5	1.0	1.4	0.8
		1963..	8.1	2.7	3.8	1.1	3.1	1.2
Natural gas.....		1967..	1.8	0.5	3.2	0.7	0.6	-
		1963..	2.7	0.6	1.7	0.4	0.7	1.0
Louisiana.....		1967..	455.5	115.4	593.7	171.2	152.3	16.6
		1963..	371.3	91.7	476.0	124.1	149.2	6.3
Crude petroleum.....		1967..	328.1	82.9	468.1	130.1	104.8	10.3
		1963..	305.2	74.8	407.5	106.7	118.7	5.0
Natural gas.....		1967..	127.4	32.5	125.6	41.1	47.5	6.3
		1963..	66.2	16.9	68.6	17.5	30.5	1.2
North Louisiana.....		1967..	25.1	7.7	(NA)	4.7	9.8	2.9
		1963..	27.5	10.2	27.1	6.8	9.1	1.5
Crude petroleum.....		1967..	17.2	6.0	(NA)	3.3	7.2	0.7
		1963..	23.4	8.6	23.7	5.9	7.9	1.0
Natural gas.....		1967..	7.9	1.7	(NA)	1.4	2.6	2.2
		1963..	4.2	1.6	3.4	0.9	1.2	0.5
South Louisiana.....		1967..	222.6	58.0	(NA)	87.2	72.0	5.4
		⁴ 1963..	343.8	81.5	448.9	117.3	140.2	4.8
Crude petroleum.....		1967..	158.7	42.9	(NA)	67.1	45.5	3.2
		⁴ 1963..	281.8	66.2	383.8	100.8	110.9	4.0
Natural gas.....		1967..	63.9	15.1	(NA)	20.1	26.5	2.2
		⁴ 1963..	62.0	15.3	65.2	16.6	29.3	0.8
Offshore Louisiana.....		1967..	207.7	49.7	(NA)	79.3	70.5	8.3
		1963..	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Oklahoma.....		1967..	114.7	39.5	99.7	27.5	44.0	3.7
		1963..	127.2	40.7	116.0	29.9	42.4	14.2
Crude petroleum.....		1967..	105.9	36.4	90.7	25.2	41.0	3.3
		1963..	120.9	39.1	111.9	29.0	39.6	13.2
Natural gas.....		1967..	8.8	3.1	9.0	2.3	3.0	0.4
		1963..	6.3	1.6	4.1	0.9	2.8	1.0
Texas.....		1967..	509.0	142.9	641.7	140.8	195.5	29.8
		1963..	484.3	139.8	474.8	120.3	178.1	46.1
Crude petroleum.....		1967..	422.0	115.9	546.4	117.3	167.6	21.3
		1963..	427.8	126.4	411.6	104.6	155.9	41.0
Natural gas.....		1967..	86.9	27.0	95.3	23.5	27.9	8.5
		1963..	56.4	13.4	63.2	15.7	22.3	5.1
Texas Gulf Coast A.....		1967..	68.6	20.9	(NA)	21.8	23.3	2.6
		⁴ 1963..	76.6	20.6	72.8	19.6	31.7	4.7
Crude petroleum.....		1967..	62.2	19.1	(NA)	20.1	20.5	2.5
		⁴ 1963..	70.8	19.2	68.6	18.4	29.2	4.0
Natural gas.....		1967..	6.3	1.8	(NA)	1.7	2.8	-
		⁴ 1963..	5.8	1.4	4.2	1.2	2.4	0.7
Texas Gulf Coast B.....		1967..	27.7	7.9	(NA)	6.8	11.9	1.1
		⁴ 1963..	28.3	5.9	27.9	7.1	11.6	3.7
Crude petroleum.....		1967..	20.1	4.8	(NA)	5.1	10.0	0.2
		⁴ 1963..	13.5	3.3	13.1	3.3	5.7	1.2
Natural gas.....		1967..	7.6	3.1	(NA)	1.7	1.9	0.9
		⁴ 1963..	14.8	2.6	14.8	3.8	5.9	2.5

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Geographic area and type of operation	Supplies used and purchased machinery installed					
	Total	Purchased machinery installed	Steel mill shapes and forms		All other supplies	Undistributed supplies used and purchased machinery installed
			Quantity	Cost		
	(million dollars)	(million dollars)	(1,000 short tons)	(million dollars)	(million dollars)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GASES--Continued						
South Texas.....1967..	64.7	17.0	(NA)	17.2	29.4	1.1
⁴ 1963..	48.1	10.7	72.1	18.3	17.5	1.6
Crude petroleum.....1967..	38.8	7.9	(NA)	9.9	20.2	0.8
⁴ 1963..	35.7	7.7	57.2	14.6	11.7	1.6
Natural gas.....1967..	25.9	9.1	(NA)	7.3	9.2	0.3
⁴ 1963..	12.4	3.0	14.9	3.6	5.8	-
Southwest Texas.....1967..	8.5	2.3	(NA)	2.5	2.6	1.1
1963..	7.0	1.5	5.9	1.5	2.4	1.7
Crude petroleum.....1967..	7.1	2.0	(NA)	2.2	1.9	1.0
1963..	5.5	1.2	4.3	1.1	1.6	1.6
Natural gas.....1967..	1.4	0.3	(NA)	0.3	0.7	0.1
1963..	1.5	0.3	1.5	0.4	0.8	0.1
North Central Texas A.....1967..	28.3	7.5	(NA)	6.2	10.4	4.2
1963..	34.1	10.7	27.6	6.6	8.4	8.4
Crude petroleum.....1967..	26.1	6.7	(NA)	5.6	9.8	4.0
1963..	31.3	10.2	21.6	5.1	7.6	8.3
Natural gas.....1967..	2.2	0.8	(NA)	0.6	0.6	0.2
1963..	2.8	0.5	6.0	1.5	0.8	(Z)
North Central Texas B.....1967..	13.9	4.7	(NA)	3.6	5.1	0.6
1963..	17.2	5.8	9.6	2.2	5.8	3.3
East Texas A.....1967..	10.1	2.8	(NA)	2.2	2.4	2.8
1963..	12.5	3.4	8.6	2.0	4.3	2.7
Crude petroleum.....1967..	7.4	1.6	(NA)	1.4	1.7	2.7
1963..	11.8	3.2	7.9	1.8	4.3	2.5
Natural gas.....1967..	2.8	1.2	(NA)	0.8	0.7	0.1
1963..	0.6	0.2	0.7	0.2	0.1	0.2
East Texas B.....1967..	29.6	9.0	(NA)	5.0	8.9	6.7
1963..	32.5	10.5	27.8	6.0	12.6	3.5
Crude petroleum.....1967..	27.1	8.1	(NA)	4.4	8.0	6.6
1963..	29.0	9.5	24.7	5.2	11.1	3.2
Natural gas.....1967..	2.5	0.9	(NA)	0.6	0.9	0.1
1963..	3.4	0.9	3.1	0.8	1.4	0.3
West Texas A.....1967..	181.1	53.7	(NA)	50.9	72.9	3.6
1963..	166.4	51.5	161.7	41.6	61.4	11.8
West Texas B.....1967..	36.1	7.2	(NA)	12.2	15.9	0.8
1963..	25.7	8.2	22.7	5.9	10.0	1.6
Texas Panhandle.....1967..	26.8	9.3	(NA)	6.7	9.7	1.1
1963..	36.2	11.1	38.2	9.5	12.4	3.1
Crude petroleum.....1967..	12.8	3.9	(NA)	3.5	5.3	0.1
1963..	23.5	7.2	23.0	6.0	8.0	2.2
Natural gas.....1967..	14.0	5.4	(NA)	3.2	4.4	1.0
1963..	12.7	3.9	15.2	3.5	4.4	0.9
Offshore Texas.....1967..	13.8	0.8	(NA)	5.9	3.0	4.1
1963..	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Mountain Division.....1967..	162.7	47.7	136.9	39.7	67.3	8.0
1963..	161.0	60.7	160.6	34.5	57.0	8.9
Crude petroleum.....1967..	142.1	43.5	117.9	34.8	56.7	7.1
1963..	140.8	54.3	144.7	30.3	48.1	8.1
Natural gas.....1967..	20.6	4.2	19.0	4.9	10.6	0.9
1963..	20.2	6.4	15.9	4.1	8.9	0.8
Montana.....1967..	13.6	4.7	10.8	4.1	4.6	0.2
1963..	18.9	9.6	16.7	3.7	4.7	0.9

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963-Continued

(See appendix, Explanation of Terms)

Geographic area and type of operation	Supplies used and purchased machinery installed					
	Total	Purchased machinery installed	Steel mill shapes and forms		All other supplies	Undistributed supplies used and purchased installed
			Quantity	Cost		
	(million dollars)	(million dollars)	(1,000 short tons)	(million dollars)	(million dollars)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GASES--Continued						
Mountain Division--Continued						
Wyoming.....1967..	51.8	14.3	37.7	11.4	25.0	1.1
.....1963..	56.4	19.1	37.8	8.5	15.2	3.6
Colorado.....1967..	17.7	5.2	12.1	3.6	7.9	1.0
.....1963..	14.7	5.8	10.3	2.0	5.5	1.4
Crude petroleum.....1967..	14.8	4.8	10.4	3.0	6.5	0.5
.....1963..	13.0	5.3	9.8	1.9	4.5	1.3
Natural gas.....1967..	2.8	0.4	1.7	0.6	1.4	0.4
.....1963..	1.8	0.5	0.4	0.1	1.0	0.1
New Mexico.....1967..	68.8	20.4	65.6	17.9	24.8	5.7
.....1963..	60.8	18.6	71.0	15.0	24.4	2.9
Crude petroleum.....1967..	57.2	18.0	51.5	14.5	19.4	5.3
.....1963..	47.8	14.5	59.6	12.1	18.7	2.5
Natural gas.....1967..	11.6	2.4	14.1	3.4	5.4	0.4
.....1963..	13.1	4.2	11.4	2.9	5.5	0.4
East New Mexico.....1967..	55.5	17.9	(NA)	14.4	18.2	5.0
.....1963..	42.5	12.4	56.0	11.1	16.7	2.3
Crude petroleum.....1967..	54.2	17.7	(NA)	14.2	17.5	4.8
.....1963..	41.7	12.4	54.9	10.9	16.1	2.3
Natural gas.....1967..	1.3	0.2	(NA)	0.2	0.7	0.2
.....1963..	0.9	(Z)	1.1	0.3	0.6	-
West New Mexico.....1967..	13.2	2.6	(NA)	3.5	6.6	0.5
.....1963..	18.2	6.2	15.0	3.9	7.6	0.6
Crude petroleum.....1967..	2.9	0.4	(NA)	0.3	1.9	0.3
.....1963..	6.1	2.1	4.8	1.2	2.7	0.2
Natural gas.....1967..	10.3	2.2	(NA)	3.2	4.7	0.2
.....1963..	12.1	4.1	10.3	2.7	4.9	0.4
Pacific Division.....1967..	224.5	95.2	155.7	52.5	62.0	14.8
.....1963..	125.1	23.5	81.5	20.8	47.0	33.8
Crude petroleum.....1967..	206.0	84.1	149.3	48.6	58.9	14.4
.....1963..	119.8	22.7	78.1	19.8	45.1	32.2
Natural gas.....1967..	18.5	11.1	6.4	3.9	3.1	0.4
.....1963..	5.3	0.8	3.4	1.0	1.9	1.6
California.....1967..	171.8	74.1	118.5	33.7	54.0	10.0
.....1963..	118.4	22.8	77.4	19.6	42.9	33.1
Crude petroleum.....1967..	164.7	72.3	112.6	32.0	50.9	9.5
Natural gas.....1967..	7.1	1.8	5.9	1.7	3.1	0.5
North California.....1967..	5.9	1.4	(NA)	1.5	2.8	0.2
East Central California.....1967..	50.9	18.8	(NA)	9.3	19.7	3.1
Central Coastal California.....1967..	21.1	10.2	(NA)	3.5	7.0	0.4
South California.....1967..	42.3	17.9	(NA)	7.5	14.4	2.5
Offshore California.....1967..	51.6	25.9	(NA)	11.8	10.6	0.3
Alaska.....1967..	50.3	20.9	36.9	17.2	7.6	4.6
.....1963..	6.0	0.7	3.9	1.2	3.4	0.7
Crude petroleum.....1967..	38.9	11.7	36.4	15.0	7.6	4.6
Natural gas.....1967..	11.4	9.2	0.5	2.2	-	-

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Geographic area and type of operation	Supplies used and purchased machinery installed					
	Total	Purchased machinery installed	Steel mill shapes and forms ¹		All other supplies ²	Undistributed supplies used and purchased installed ³
			Quantity	Cost		
			(million dollars)	(million dollars)		
Industry 1311.--Crude Petroleum and Natural Gas--Continued						
Producing operations, total.....1967..	1,620.8	488.0	1,776.4	471.4	576.4	85.0
.....1963..	1,440.4	417.5	1,423.2	359.8	236.1	-
With drilling.....1967..	1,486.2	447.1	1,726.1	453.9	526.4	58.8
.....1963..	1,357.3	396.6	1,404.8	353.8	201.3	-
Without drilling.....1967..	91.8	31.0	39.2	10.6	48.6	1.6
.....1963..	83.1	20.9	18.3	6.0	25.6	30.6
Undistributed.....1967..	42.8	9.9	11.0	6.8	1.4	24.7
Oil well operations only.....1967..	261.9	96.6	217.7	59.8	96.3	9.2
.....1963..	227.8	71.2	108.1	27.3	64.5	64.8
With drilling.....1967..	221.1	82.2	199.7	55.2	75.6	8.1
.....1963..	179.6	62.3	103.0	26.1	57.2	38.5
Without drilling.....1967..	40.8	14.4	18.0	4.6	20.7	1.1
.....1963..	48.3	8.9	5.0	1.2	3.0	26.3
Oil and gas well operations.....1967..	1,265.7	367.3	1,502.4	391.7	462.8	43.9
.....1963..	1,180.1	334.9	1,292.3	326.8	115.8	67.8
With drilling.....1967..	1,224.5	355.4	1,484.8	386.7	437.7	43.7
.....1963..	1,152.1	325.9	1,280.4	322.3	112.5	65.4
Without drilling.....1967..	41.2	11.9	17.6	5.0	24.1	0.2
.....1963..	28.0	8.9	11.9	4.5	3.3	2.4
Gas well operations only.....1967..	50.4	14.3	45.2	13.0	16.4	6.7
.....1963..	32.5	11.4	22.8	5.7	9.9	5.5
With drilling.....1967..	40.7	9.6	41.7	12.1	12.7	6.3
.....1963..	25.7	8.3	21.4	5.4	8.3	3.7
Without drilling.....1967..	9.8	4.7	3.5	0.9	3.7	0.5
.....1963..	6.8	3.1	1.4	0.3	1.6	1.8
Nonproducing operations.....1967..	28.4	5.6	27.1	9.4	9.9	3.5
.....1963..	17.2	3.8	8.2	2.2	3.6	3.8

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

¹Represents such items as casing, tubing, pipe, plates, piling, drillsteel bars, wire, and structural shapes.

²Includes the cost of gas purchased for gas life and repressuring as follows:

Geographic area and type of operations	1967		1963	
	Quantity (million cubic feet)	Cost (million dollars)	Quantity (million cubic feet)	Cost (million dollars)
United States.....	89,210	17.0	58,771	9.5
Crude petroleum.....	60,417	11.6	54,048	8.9
Natural gas.....	28,793	5.4	4,723	0.6
West South Central.....	65,917	11.2	45,887	7.0
Crude petroleum.....	37,849	6.0	(NA)	(NA)
Natural gas.....	28,068	5.2	(NA)	(NA)
Louisiana.....	15,494	3.0	4,923	0.5
Oklahoma.....	4,897	0.7	5,518	0.7
Texas.....	45,462	7.5	35,080	5.6
Producing operations, total.....	89,206	17.0	58,771	9.5
With drilling.....	69,607	13.3	55,467	9.1
Without drilling.....	19,599	3.7	3,304	0.5
Oil and gas well operations.....	68,945	11.5	53,423	8.6

³This item represents the total cost of supplies for establishments that did not report detailed supplies. For 1967, this also includes estimates for establishments that were not mailed report forms.

⁴Data for offshore operations were collected with adjacent onshore reports for 1963.

TABLE 7B. Selected Fuels by Geographic Area and Type of Operations: 1967 and 1963

Geographic area and type of operation	Fuels produced and used at this establishment for power and heat		Purchased fuels								
	Crude petroleum, including lease condensate	Natural gas	Total cost	Gas--natural, manufactured, and mixed		Gasoline		Fuel oil		Other fuels, liquefied petroleum gas, coal, coke, wood, and other (million dollars)	Undistributed purchased fuels
				Quantity	Value	Quantity	Value	Quantity	Value		
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS											
United States, total.....1967..	3,981.0	452,470.0	48.7	(NA)	14.2	(NA)	12.4	3,015.3	13.5	3.7	5.0
.....1963..	558.0	350,417.0	56.8	72,724.0	15.3	60,494.0	17.8	1,950.0	8.2	8.0	7.5
Crude petroleum.....1967..	3,953.0	379,235.0	43.7	(NA)	13.2	37,227.0	11.6	2,675.7	12.1	4.1	2.7
.....1963..	555.0	320,001.0	50.8	60,885.0	13.2	53,309.0	15.7	1,727.0	7.2	7.4	7.3
Natural gas.....1967..	28.0	73,235.0	5.0	(NA)	1.0	(NA)	2.0	289.6	1.4	0.3	0.3
.....1963..	3.0	30,416.0	6.1	11,839.0	2.1	7,185.0	2.1	223.0	1.1	0.6	0.2
Geographic Areas											
Northeast Region, total.....1967..	3.0	2,081.0	0.8	1,773.0	0.2	290.0	0.1	(D)	(D)	(Z)	(D)
.....1963..	-	3,211.0	0.8	1,314.0	(NA)	393.0	(NA)	9.0	(NA)	(Z)	0.1
East North Central Division.....1967..	13.0	3,541.0	2.2	861.0	0.2	2,626.0	0.8	16.4	0.1	0.5	0.6
.....1963..	50.0	3,741.0	3.4	599.0	(NA)	3.0	(NA)	42.0	(NA)	0.5	1.5
Illinois.....1967..	10.0	2,430.0	1.5	354.0	0.1	1,813.0	0.6	11.2	0.1	0.5	0.2
.....1963..	4.0	1,873.0	1.5	425.0	(NA)	1,553.0	(NA)	24.0	(NA)	0.3	0.5
West North Central Division.....1967..	23.0	5,409.0	6.6	13,308.0	3.1	4,122.0	1.3	180.0	0.6	1.1	0.5
.....1963..	9.0	4,810.0	7.1	13,524.0	(NA)	4,660.0	(NA)	152.0	(NA)	1.2	0.8
Crude petroleum.....1967..	22.0	4,639.0	6.1	12,691.0	3.0	3,344.0	1.0	166.8	0.5	1.1	0.5
.....1963..	9.0	3,973.0	6.8	12,996.0	(NA)	4,172.0	(NA)	149.0	(NA)	1.2	0.8
Natural gas.....1967..	1.0	1,458.0	0.5	617.0	0.2	778.0	0.2	13.1	0.1	(Z)	-
.....1963..	-	837.0	0.3	528.0	(NA)	488.0	(NA)	3.0	(NA)	(Z)	(Z)
Kansas.....1967..	6.0	4,041.0	5.6	11,698.0	2.8	3,425.0	1.1	167.0	0.5	0.9	0.3
.....1963..	7.0	2,431.0	6.1	11,686.0	(NA)	3,844.0	(NA)	146.0	(NA)	0.9	0.6
East South Central Division.....1967..	4.0	10,404.0	1.5	1,760.0	0.4	1,244.0	0.4	49.8	0.2	0.2	0.3
.....1963..	4.0	8,859.0	2.1	2,438.0	(NA)	1,417.0	(NA)	15.0	(NA)	0.2	0.6
Kentucky.....1967..	2.0	1,377.0	0.3	401.0	0.1	350.0	0.1	10.1	(Z)	(Z)	-
.....1963..	4.0	1,354.0	0.4	60.0	(NA)	518.0	(NA)	5.0	(NA)	0.1	0.1
Mississippi.....1967..	2.0	8,785.0	1.0	1,213.0	0.3	814.0	0.2	40.8	0.2	0.2	0.1
.....1963..	-	7,048.0	1.3	2,167.0	(NA)	857.0	(NA)	10.0	(NA)	0.2	0.2
West South Central Division.....1967..	135.0	317,421.0	27.4	(NA)	7.4	27,382.0	8.1	1 913.4	8.4	1.7	1.8
.....1963..	156.0	242,417.0	35.4	46,988.0	(NA)	38,441.0	(NA)	1 512.0	(NA)	4.6	4.0
Crude petroleum.....1967..	132.0	256,292.0	24.2	(NA)	6.8	22,110.0	6.7	1,690.5	7.5	1.5	1.7
.....1963..	156.0	218,069.0	31.0	37,398.0	(NA)	34,301.0	(NA)	1,335.0	(NA)	4.1	3.9
Natural gas.....1967..	3.0	61,129.0	3.2	(NA)	0.6	5,272.0	1.3	222.7	0.9	0.2	0.2
.....1963..	-	24,348.0	4.5	9,590.0	(NA)	4,140.0	(NA)	166.0	(NA)	0.6	0.1
Arkansas.....1967..	2.0	2,132.0	0.7	1,650.0	0.4	188.0	0.1	(D)	(D)	(Z)	(D)
.....1963..	-	1,314.0	0.9	1,563.0	(NA)	355.0	(NA)	5.0	(NA)	0.1	0.3
Louisiana.....1967..	-	145,426.0	10.8	6,696.0	1.1	5,292.0	1.7	1,797.8	7.8	0.2	-
.....1963..	57.0	97,906.0	9.9	9,807.0	(NA)	6,793.0	(NA)	970.0	(NA)	0.7	0.6
Crude petroleum.....1967..	-	118,162.0	9.2	5,187.0	0.9	3,610.0	1.1	1,598.2	7.1	0.1	-
.....1963..	57.0	91,954.0	8.4	7,625.0	(NA)	5,779.0	(NA)	898.0	(NA)	0.4	0.5
Natural gas.....1967..	-	27,264.0	1.6	1,509.0	0.2	1,682.0	0.5	199.6	0.7	0.1	-
.....1963..	-	5,952.0	1.6	2,182.0	(NA)	1,014.0	(NA)	72.0	(NA)	0.3	0.1
North Louisiana.....1967..	(NA)	(NA)	1.5	(NA)	0.7	(NA)	0.4	(NA)	0.3	0.1	-
.....1963..	55.0	18,992.0	1.5	2,396.0	(NA)	1,413.0	(NA)	15.0	(NA)	0.1	0.4
South Louisiana.....1967..	(NA)	(NA)	3.9	(NA)	(D)	(NA)	1.1	(NA)	2.3	(Z)	(D)
.....1963..	12.0	178,914.0	18.4	17,411.0	(NA)	15,380.0	(NA)	1609.0	(NA)	10.5	10.2
Offshore Louisiana.....1967..	(NA)	(NA)	5.4	(NA)	(D)	(NA)	0.1	(NA)	5.1	(Z)	(Z)
.....1963..	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Oklahoma.....1967..	57.0	24,742.0	4.2	10,493.0	1.9	4,250.3	1.4	39.9	0.2	0.4	0.3
.....1963..	1.0	21,591.0	5.2	10,410.0	(NA)	5,682.0	(NA)	61.0	(NA)	0.4	0.9

See footnotes at end of table.

TABLE 7B. Selected Fuels by Geographic Area and Type of Operations: 1967 and 1963--Continued

Geographic area and type of operation	Fuels produced and used at this establishment for power and heat		Purchased fuels								
	Crude petroleum, including lease condensate	Natural gas	Total cost	Gas--natural, manufactured, and mixed		Gasoline		Fuel oil		Other fuels, liquefied petroleum gas, coal, coke, wood, and other	Undistributed purchased fuels
				Quantity	Value	Quantity	Value	Quantity	Value		
				(million cubic feet)	(million dollars)	(1,000 gallons)	(million dollars)	(1,000 barrels)	(million dollars)		
	(1,000 barrels)	(million cubic feet)	(million dollars)	(million cubic feet)	(million dollars)	(1,000 gallons)	(million dollars)	(1,000 barrels)	(million dollars)	(million dollars)	(million dollars)
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued											
West North Central Division--Continued											
Texas.....1967..	73.0	145,121.0	11.8	(NA)	4.1	17,308.0	5.0	72.6	0.4	1.1	1.2
.....1963..	98.0	121,606.0	19.5	25,208.0	(NA)	25,611.0	(NA)	471.0	(NA)	3.4	2.4
Crude petroleum.....1967..	73.0	117,598.0	10.5	(NA)	3.8	14,094.0	4.3	54.0	0.3	1.0	1.1
.....1963..	98.0	103,894.0	16.8	18,064.0	(NA)	22,918.0	(NA)	374.0	(NA)	3.1	2.3
Natural gas.....1967..	-	27,523.0	1.3	(NA)	0.2	3,214.0	0.7	18.6	0.1	0.1	0.2
.....1963..	-	17,712.0	2.7	7,144.0	(NA)	2,693.0	(NA)	86.0	(NA)	0.3	0.1
Texas Gulf Coast A.....1967..	(NA)	(NA)	1.2	(NA)	0.2	(NA)	0.7	(NA)	0.1	(Z)	0.2
.....1963..	15.0	126,808.0	11.5	1893.0	(NA)	12,975.1	(NA)	120.0	(NA)	10.4	-
Texas Gulf Coast B.....1967..	(NA)	(NA)	0.5	(NA)	0.1	(NA)	0.3	(NA)	(Z)	(Z)	0.1
.....1963..	-	14,114.0	11.8	16,196	(NA)	12,140.0	(NA)	13.0	(NA)	10.1	(Z)
North Central Texas A.....1967..	(NA)	(NA)	1.4	(NA)	0.5	(NA)	0.3	(NA)	(Z)	0.2	0.4
.....1963..	49.0	4,044.0	2.6	2,788.0	(NA)	1,193.0	(NA)	151.0	(NA)	0.6	0.7
North Central Texas B.....1967..	(NA)	(NA)	0.6	(NA)	0.1	(NA)	0.3	(NA)	(Z)	0.1	0.1
.....1963..	-	3,069.0	1.4	436.0	(NA)	1,296.0	(NA)	42.0	(NA)	0.6	0.2
East Texas B.....1967..	(NA)	(NA)	1.2	(NA)	0.5	(NA)	0.3	(NA)	(Z)	0.1	0.3
.....1963..	-	5,765.0	1.8	3,446.0	(NA)	1,738.0	(NA)	19.0	(NA)	0.2	0.3
West Texas A.....1967..	(NA)	(NA)	4.4	(NA)	2.0	(NA)	1.7	(NA)	0.1	0.4	0.2
.....1963..	44.0	43,115.0	6.1	6,771.0	(NA)	10,366.0	(NA)	32.0	(NA)	1.0	0.7
West Texas B.....1967..	(NA)	(NA)	0.5	(NA)	0.1	(NA)	0.2	(NA)	0.1	0.1	-
.....1963..	-	3,615.0	0.6	872.0	(NA)	666.0	(NA)	9.0	(NA)	0.1	0.1
Texas Panhandle.....1967..	(NA)	(NA)	0.6	(NA)	0.1	(NA)	0.3	(NA)	(Z)	(Z)	0.2
.....1963..	-	4,976.0	1.4	1,403.0	(NA)	1,517.0	(NA)	99.0	(NA)	0.2	0.1
Mountain Division.....1967..	107.0	36,869.0	3.8	(NA)	1.5	6,676.0	1.4	29.7	0.2	0.7	-
.....1963..	90.0	32,692.0	4.1	5,263.0	(NA)	6,214.0	(NA)	74.0	(NA)	0.8	0.3
Montana.....1967..	14.0	5,122.0	0.9	774.0	0.2	270.0	0.1	(D)	(D)	0.1	(D)
.....1963..	1.0	2,907.0	0.4	359.0	(NA)	462.0	(NA)	1.0	(NA)	0.2	0.1
Wyoming.....1967..	47.0	13,115.0	2.0	(NA)	0.8	1,982.0	0.5	8.0	0.2	0.3	0.2
.....1963..	79.0	10,387.0	1.5	2,173.0	(NA)	1,726.0	(NA)	65.0	(NA)	0.3	0.1
Colorado.....1967..	40.0	7,795.0	0.7	714.0	0.1	722.0	0.2	(D)	(D)	0.1	(D)
.....1963..	1.0	6,375.0	0.5	623.0	(NA)	895.0	(NA)	4.0	(NA)	0.1	-
New Mexico.....1967..	2.0	10,967.0	1.2	2,310.0	0.4	1,527.0	0.5	(D)	(D)	0.1	(D)
.....1963..	6.0	10,320.0	1.5	2,064.0	(NA)	2,852.0	(NA)	2.0	(NA)	0.2	0.1
Pacific Division.....1967..	3,693.0	69,699.0	6.6	7,041.0	1.2	(D)	(D)	927.5	4.5	(Z)	(D)
.....1963..	249.0	51,413.0	3.6	2,261.0	(NA)	5,659.0	(NA)	113.0	(NA)	0.7	0.1
California.....1967..	3,693.0	67,970.0	3.0	(D)	(D)	(D)	(D)	167.3	1.2	(Z)	(D)
.....1963..	249.0	51,403.0	3.2	2,261.0	(NA)	5,590.0	(NA)	70.0	(NA)	0.7	(Z)
Alaska.....1967..	-	1,729.0	3.4	(D)	(D)	(D)	(D)	760.2	3.3	(Z)	(D)
.....1963..	-	10.0	0.4	-	(NA)	57.0	(NA)	53.0	(NA)	-	-
Producing operations, total.....1967..	3,981.0	452,470.0	48.1	(NA)	14.0	(NA)	13.3	2,641.3	13.3	4.0	3.5
.....1963..	558.0	350,408.0	55.0	72,698.0	(NA)	60,128.0	(NA)	1,896.0	(NA)	7.8	6.2
With drilling.....1967..	3,924.0	414,993.0	41.3	(NA)	12.7	(NA)	12.0	2,598.9	12.9	3.7	-
.....1963..	393.0	323,038.0	47.9	65,732.0	(NA)	55,452.0	(NA)	1,846.0	(NA)	3.2	5.0
Type of Operation											
Without drilling.....1967..	57.0	37,477.0	5.2	(NA)	1.4	4,702.0	1.3	80.0	0.2	0.3	2.0
.....1963..	165.0	27,370.0	7.1	6,966.0	(NA)	4,676.0	(NA)	50.0	(NA)	1.0	3.0
Undistributed.....1967..	-	-	1.6	-	-	-	-	374.0	0.1	-	1.5
Oil well operations only.....1967..	1,332.0	50,559.0	9.8	13,400.0	2.6	9,754.0	3.2	200.2	1.0	1.2	1.8
.....1963..	316.0	25,996.0	18.5	12,768.0	(NA)	16,217.0	(NA)	532.0	(NA)	3.5	4.8
With drilling.....1967..	1,286.0	34,943.0	6.8	9,287.0	1.8	7,111.0	2.4	162.4	0.9	1.2	0.5
.....1963..	155.0	18,471.0	17.2	8,348.0	(NA)	13,503.0	(NA)	498.0	(NA)	2.6	2.2
Without drilling.....1967..	46.0	15,616.0	3.0	4,113.0	0.8	2,643.0	0.8	57.8	0.1	(Z)	1.3
.....1963..	161.0	7,525.0	7.3	4,420.0	(NA)	2,714.0	(NA)	34.0	(NA)	0.8	2.7

See footnotes at end of table.

TABLE 7B. Selected Fuels by Geographic Area and Type of Operations: 1967 and 1963—Continued

Geographic area and type of operation	Fuels produced and used at this establishment for power or heat		Purchased fuels								
	Crude petroleum including lease condensate (1,000 barrels)	Natural gas (million cubic feet)	Total cost (million dollars)	Gas--natural, manufactured, and mixed		Gasoline		Fuel oil		Other fuels, liquefied petroleum gas, coal, coke, wood, and other (million dollars)	Undistributed purchased fuels (million dollars)
				Quantity (million cubic feet)	Value (million dollars)	Quantity (1,000 gallons)	Value (million dollars)	Quantity (1,000 barrels)	Value (million dollars)		
INDUSTRY 1311.--CRUDE PETROLEUM AND NATURAL GAS--Continued											
Producing operations--Continued											
Oil and gas well operations.....1967..	2,638.0	394,810.0	35.9	(NA)	11.3	(NA)	9.8	2,311.1	12.1	1.9	0.8
1963..	242.0	320,080.0	35.2	58,952.0	(NA)	42,802.0	(NA)	1,259.0	(NA)	4.1	1.3
With drilling.....1967..	2,631.0	376,624.0	33.9	(NA)	10.8	(NA)	9.3	2,291.9	12.0	1.8	-
1963..	238.0	302,676.0	33.8	56,428.0	(NA)	41,123.0	(NA)	1,247.0	(NA)	4.0	1.0
Without drilling.....1967..	7.0	18,186.0	2.0	3,781.0	0.5	1,695.0	0.4	22.1	0.1	0.2	0.8
1963..	4.0	17,404.0	1.4	2,524.0	(NA)	1,679.0	(NA)	12.0	(NA)	0.1	0.3
Gas well operations only.....1967..	11.0	7,101.0	0.9	549.0	0.1	1,245.0	0.4	15.1	0.1	(Z)	0.2
1963..	-	4,332.0	1.2	978.0	(NA)	1,109.0	(NA)	105.0	(NA)	0.2	0.1
With drilling.....1967..	7.0	3,426.0	0.6	203.0	0.1	881.0	0.3	15.0	0.1	(Z)	0.1
1963..	-	1,891.0	1.0	956.0	(NA)	826.0	(NA)	101.0	(NA)	0.2	-
Without drilling.....1967..	4.0	3,675.0	0.3	346.0	0.1	364.0	0.1	(Z)	-	(Z)	0.1
1963..	-	2,441.0	0.2	22.0	(NA)	283.0	(NA)	4.0	(NA)	(Z)	0.1
Nonproducing operations.....1967..	-	-	0.5	433.0	0.1	364.0	0.1	44.9	0.3	(Z)	-
1963..	-	9.0	1.9	26.0	(NA)	366.0	(NA)	54.0	(NA)	0.2	1.2

Standard notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

¹Data for offshore operations were collected with adjacent onshore reports for 1963.

TABLE 7C. Lease Tanks and Lease Stocks at the End of Year, by Geographic Area: 1967 and 1963

Industry and geographic area	End of 1967 ¹			End of 1963		
	Lease tanks		Lease stocks (1,000 barrels)	Lease tanks		Lease stocks (1,000 barrels)
	Number	Capacity (1,000 barrels)		Number	Capacity (1,000 barrels)	
United States, total.....	189,768	82,304.7	25,695.5	222,232	99,858.0	31,939.0
Crude petroleum subindustry.....	162,911	72,451.2	22,205.1	203,619	93,154.0	29,631.0
Natural gas subindustry.....	23,145	8,896.6	3,229.4	15,816	6,064.0	2,096.0
Oil and gas field services.....	3,712	956.9	261.1	2,797	640.0	212.0
Middle Atlantic Division, total.....	1,276	120.9	34.8	2,250	352.0	87.0
Crude petroleum subindustry.....	1,058	102.1	30.2	2,162	349.0	86.0
Natural gas subindustry.....	130	7.8	1.8	(NA)	(NA)	(NA)
Oil and gas field services.....	88	11.0	2.8	(NA)	(NA)	(NA)
New York, total.....	175	19.3	5.4	400	74.0	14.0
Crude petroleum subindustry.....	175	19.3	5.4	383	72.0	14.0
Pennsylvania, total.....	1,101	101.6	29.5	1,848	277.0	72.0
Crude petroleum subindustry.....	883	82.8	24.9	1,777	275.0	72.0
Natural gas subindustry.....	130	7.8	1.8	(NA)	(NA)	(NA)
Oil and gas field services.....	88	11.0	2.8	(NA)	(NA)	(NA)
East North Central Division, total.....	16,386	3,119.7	807.6	19,261	4,961.0	1,014.0
Crude petroleum subindustry.....	14,700	2,858.4	763.9	18,787	4,900.0	996.0
Natural gas subindustry.....	1,103	145.1	27.0	315	34.0	12.0
Oil and gas field services.....	583	116.2	16.7	159	27.0	6.0
Ohio, total.....	3,777	504.1	82.9	2,420	344.0	175.0
Crude petroleum subindustry.....	2,878	405.4	71.6	2,081	308.0	96.0
Natural gas subindustry.....	807	81.8	8.5	(NA)	(NA)	(NA)
Oil and gas field services.....	92	16.9	2.6	(NA)	(NA)	(NA)
Indiana, total.....	1,534	284.8	79.9	4,146	265.0	75.0
Crude petroleum subindustry.....	1,483	275.0	77.2	4,132	263.0	75.0
Oil and gas field services.....	51	9.8	2.7	(NA)	(NA)	(NA)
Illinois, total.....	8,664	1,876.6	508.6	10,025	3,810.0	596.0
Crude petroleum subindustry.....	8,235	1,792.7	497.4	9,906	3,788.0	591.0
Michigan, total.....	2,411	454.0	136.1	2,670	542.0	168.0
Crude petroleum subindustry.....	2,104	385.4	117.7	(NA)	(NA)	(NA)
West North Central Division, total.....	21,467	5,772.7	1,553.9	23,228	6,366.0	1,834.0
Crude petroleum subindustry.....	19,564	5,317.6	1,402.3	21,846	6,044.0	1,706.0
Natural gas subindustry.....	1,366	320.8	112.6	1,104	262.0	110.0
Oil and gas field services.....	537	134.3	38.9	278	60.0	18.0
North Dakota, total.....	1,550	1,160.8	268.0	1,238	742.0	248.0
Nebraska, total.....	908	288.1	88.2	1,420	470.0	136.0
Kansas, total.....	18,833	4,275.8	1,183.7	20,539	5,144.0	1,446.0
Crude petroleum subindustry.....	16,978	3,837.1	1,039.3	19,200	4,834.0	1,211.0
Natural gas subindustry.....	1,356	318.1	112.1	1,104	262.0	110.0
Oil and gas field services.....	499	120.6	32.3	235	48.0	14.0
South Atlantic Division, total.....	1,534	187.5	65.3	1,282	202.0	70.0
Crude petroleum subindustry.....	969	119.9	49.4	1,061	185.0	67.0
Natural gas subindustry.....	493	60.7	12.8	(NA)	(NA)	(NA)
Oil and gas field services.....	72	6.9	3.1	(NA)	(NA)	(NA)
East South Central Division, total.....	6,017	2,415.2	818.6	5,391	2,158.0	759.0
Crude petroleum subindustry.....	5,134	2,161.1	714.5	5,070	2,083.0	738.0
Natural gas subindustry.....	572	200.1	83.1	234	57.0	17.0
Oil and gas field services.....	311	54.0	21.0	87	18.0	4.0
Kentucky, total.....	2,678	424.0	133.6	2,680	442.0	158.0
Crude petroleum subindustry.....	2,214	380.8	119.9	2,485	417.0	154.0
Natural gas subindustry.....	263	31.7	11.0	118	13.0	4.0
Oil and gas field services.....	201	11.6	2.7	(NA)	(NA)	(NA)
Alabama, total.....	381	290.2	95.5	289	215.0	101.0
Crude petroleum subindustry.....	381	290.2	95.5	289	215.0	101.0
Mississippi, total.....	2,958	1,701.0	589.4	2,413	1,497.0	500.0
Crude petroleum subindustry.....	2,539	1,490.1	499.1	2,287	1,448.0	483.0

See footnotes at end of table.

TABLE 7C. Lease Tanks and Lease Stocks at the End of Year, by Geographic Area:
1967 and 1963—Continued

Industry and geographic area	End of 1967			End of 1963		
	Lease tanks		Lease stocks (1,000 barrels)	Lease tanks		Lease stocks (1,000 barrels)
	Number	Capacity (1,000 barrels)		Number	Capacity (1,000 barrels)	
West South Central Division, total.....	119,825	53,580.0	16,844.1	142,928	60,515.0	18,450.0
Crude petroleum subindustry.....	101,072	45,741.1	14,049.5	128,808	54,983.0	16,543.0
Natural gas subindustry.....	16,888	7,329.2	2,643.0	11,960	5,021.0	1,732.0
Oil and gas field services.....	1,865	509.9	151.6	2,160	511.0	175.0
Arkansas, total.....	1,578	468.1	140.1	2,193	673.0	207.0
Crude petroleum subindustry.....	1,431	423.2	126.6	2,151	665.0	203.0
Natural gas subindustry.....	69	21.2	8.5	(NA)	(NA)	(NA)
Oil and gas field services.....	78	23.7	5.1	(NA)	(NA)	(NA)
Louisiana, total.....	11,742	9,263.9	3,997.2	13,203	10,123.0	4,691.0
Crude petroleum subindustry.....	8,171	6,479.0	2,706.5	10,485	8,339.0	3,945.0
Natural gas subindustry.....	3,300	2,699.0	1,268.7	2,476	1,717.0	718.0
Oil and gas field services.....	271	86.0	21.9	242	67.0	28.0
North Louisiana, total.....	4,435	1,348.8	452.5	4,889	1,503.0	503.0
Crude petroleum subindustry.....	3,473	1,041.6	355.0	3,901	1,193.0	391.0
Natural gas subindustry.....	750	254.1	85.7	792	268.0	90.0
Oil and gas field services.....	212	53.2	11.9	196	42.0	22.0
South Louisiana, total.....	6,802	5,643.5	2,371.5	² 8,314	² 8,620.0	² 4,188.0
Crude petroleum subindustry.....	4,296	3,742.3	1,459.1	² 6,584	² 7,146.0	² 3,554.0
Natural gas subindustry.....	2,447	1,868.5	902.4	² 1,684	² 1,449.0	² 628.0
Oil and gas field services.....	59	32.8	10.0	² 46	² 25.0	² 6.0
Offshore Louisiana, total.....	505	2,271.5	1,173.1	(²)	(²)	(²)
Crude petroleum subindustry.....	402	1,695.2	892.5	(²)	(²)	(²)
Natural gas subindustry.....	103	576.4	280.6	(²)	(²)	(²)
Oklahoma, total.....	29,213	6,668.4	2,154.6	34,228	7,355.0	2,209.0
Crude petroleum subindustry.....	26,769	6,070.3	1,965.1	31,906	6,861.0	2,051.0
Natural gas subindustry.....	1,898	492.4	154.4	(NA)	(NA)	(NA)
Oil and gas field services.....	546	105.7	35.1	(NA)	(NA)	(NA)
Texas, total.....	77,292	37,179.6	10,552.3	93,284	42,364.0	11,343.0
Crude petroleum subindustry.....	64,701	32,768.6	9,251.3	84,266	39,118.0	10,344.0
Natural gas subindustry.....	11,621	4,116.6	1,211.4	7,934	2,942.0	899.0
Oil and gas field services.....	970	294.5	89.6	1,084	304.0	100.0
Texas Gulf Coast A, total.....	6,888	3,607.8	1,313.2	³ 11,148	³ 4,120.0	³ 1,333.0
Crude petroleum subindustry.....	5,816	3,170.2	1,171.1	³ 10,413	³ 3,798.0	³ 1,241.0
Natural gas subindustry.....	960	387.2	131.6	³ 623	267.0	³ 77.0
Oil and gas field services.....	112	50.4	10.5	³ 112	55.0	³ 15.0
Texas Gulf Coast B, total.....	3,289	1,512.8	536.4	³ 4,201	³ 2,001.0	³ 599.0
Crude petroleum subindustry.....	2,107	1,050.4	374.5	³ 2,393	³ 1,232.0	³ 372.0
Natural gas subindustry.....	1,102	439.8	152.3	³ 1,732	³ 749.0	³ 222.0
Oil and gas field services.....	80	22.6	9.6	(NA)	(NA)	(NA)
South Texas, total.....	4,576	2,148.8	773.7	³ 5,871	³ 2,836.0	³ 1,031.0
Crude petroleum subindustry.....	2,648	1,309.3	518.0	³ 4,520	³ 2,140.0	³ 841.0
Natural gas subindustry.....	1,873	825.2	251.0	³ 1,290	³ 678.0	³ 184.0
Oil and gas field services.....	55	14.3	4.7	(NA)	(NA)	(NA)
South West Texas, total.....	2,108	844.9	255.1	1,747	648.0	251.0
Crude petroleum subindustry.....	1,755	686.4	208.9	1,471	524.0	192.0
Natural gas subindustry.....	313	149.9	43.3	251	118.0	57.0
Oil and gas field services.....	40	8.5	3.0	(NA)	(NA)	(NA)
North Central Texas A, total.....	11,352	2,504.6	810.9	16,316	2,943.0	874.0
Crude petroleum subindustry.....	9,684	2,100.7	673.8	14,656	2,603.0	770.0
Natural gas subindustry.....	1,430	358.8	123.8	1,442	309.0	89.0
Oil and gas field services.....	238	45.0	13.2	218	31.0	15.0
North Central Texas B, total.....	6,277	1,709.3	587.8	8,018	1,945.0	699.0
Crude petroleum subindustry.....	5,625	1,570.6	543.4	7,667	1,879.0	674.0
Natural gas subindustry.....	502	103.3	31.5	270	53.0	18.0
Oil and gas field services.....	150	35.3	12.9	(NA)	(NA)	(NA)
East Texas A, total.....	1,157	403.3	143.5	3,927	887.0	322.0
Crude petroleum subindustry.....	862	280.3	103.7	3,618	779.0	289.0
East Texas B, total.....	8,221	3,681.0	1,131.7	8,449	3,669.0	980.0
Crude petroleum subindustry.....	7,427	3,388.0	1,051.5	7,595	3,398.0	903.0
Natural gas subindustry.....	662	239.8	67.6	763	268.0	76.0
Oil and gas field services.....	132	53.2	12.6	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 7C. Lease Tanks and Lease Stocks at the End of Year, by Geographic Area:
1967 and 1963—Continued

Industry and geographic area	End of 1967			End of 1963		
	Lease tanks		Lease stocks (1,000 barrels)	Lease tanks		Lease stocks (1,000 barrels)
	Number	Capacity (1,000 barrels)		Number	Capacity (1,000 barrels)	
West Texas A, total.....	21,519	16,428.1	3,767.3	25,063	20,287.0	4,143.0
Crude petroleum subindustry.....	20,644	16,059.2	3,627.4	24,812	20,175.0	4,104.0
Natural gas subindustry.....	812	345.5	132.4	100	42.0	16.0
Oil and gas field services.....	63	23.4	7.5	151	70.0	23.0
West Texas B, total.....	5,946	1,775.3	713.3	3,975	1,681.0	641.0
Crude petroleum subindustry.....	5,785	1,696.5	679.3	3,904	1,647.0	633.0
Natural gas subindustry.....	115	57.9	27.1	(NA)	(NA)	(NA)
Oil and gas field services.....	46	20.9	6.9	(NA)	(NA)	(NA)
Texas Panhandle, total.....	5,913	2,497.3	501.9	4,569	1,347.0	470.0
Crude petroleum subindustry.....	2,348	1,456.8	299.6	3,217	943.0	325.0
Off shore Texas, total.....	46	66.4	17.4	(4)	(4)	(4)
Natural gas subindustry.....	46	66.4	17.4	(4)	(4)	(4)
Mountain Division, total.....	16,685	7,617.6	2,950.3	19,425	8,678.0	2,686.0
Crude petroleum subindustry.....	14,033	6,809.9	2,627.3	17,655	8,168.0	2,512.0
Natural gas subindustry.....	2,472	750.2	303.0	1,705	490.0	166.0
Oil and gas field services.....	180	57.5	20.0	65	20.0	8.0
Montana, total.....	1,493	815.8	321.0	2,674	1,095.0	264.0
Crude petroleum subindustry.....	1,446	795.7	313.6	(NA)	(NA)	(NA)
Wyoming, total.....	3,511	2,114.9	653.8	4,124	2,369.0	698.0
Crude petroleum subindustry.....	3,129	1,996.2	609.4	3,711	2,255.0	665.0
Colorado, total.....	1,301	563.1	210.6	1,579	731.0	181.0
Crude petroleum subindustry.....	1,084	485.7	181.0	1,416	670.0	160.0
New Mexico, total.....	10,018	3,767.4	1,614.9	10,719	4,171.0	1,413.0
Crude petroleum subindustry.....	8,080	3,198.1	1,380.5	9,654	3,864.0	1,305.0
Natural gas subindustry.....	1,862	547.6	226.5	1,018	294.0	103.0
Oil and gas field services.....	76	21.7	7.9	(NA)	(NA)	(NA)
West New Mexico.....	1,836	548.4	233.7	1,510	457.0	148.0
Crude petroleum subindustry.....	266	93.6	44.5	613	205.0	60.0
East New Mexico.....	8,182	3,219.1	1,381.2	9,209	3,714.0	1,265.0
Crude petroleum subindustry.....	7,814	3,104.5	1,336.0	9,041	3,659.0	1,245.0
Utah, total.....	332	302.4	124.1	314	300.0	119.0
Crude petroleum subindustry.....	264	280.3	117.0	254	283.0	114.0
Natural gas subindustry.....	68	22.1	7.1	(NA)	(NA)	(NA)
Pacific Division, total.....	6,578	9,491.1	2,620.8	8,467	16,626.0	7,039.0
Crude petroleum subindustry.....	6,381	9,341.0	2,567.9	8,230	16,442.0	6,983.0
Natural gas subindustry.....	121	82.8	46.1	(NA)	(NA)	(NA)
Oil and gas field services.....	76	67.3	6.9	(NA)	(NA)	(NA)
California, total.....	6,564	9,342.9	2,523.0	8,438	16,586.0	7,030.0
North California, total.....	109	41.1	15.9	(NA)	(NA)	(NA)
Eastcentral California, total.....	2,625	4,840.3	1,394.6	(NA)	(NA)	(NA)
Crude petroleum subindustry.....	2,570	2,798.0	1,379.3	(NA)	(NA)	(NA)
Central coastal California, total.....	1,229	1,903.9	397.4	(NA)	(NA)	(NA)
South California, total.....	2,393	2,424.0	670.2	(NA)	(NA)	(NA)
Offshore California, total.....	208	133.6	44.9	(NA)	(NA)	(NA)
Alaska, total.....	14	148.2	97.9	26	38.0	8.0

Note: Detailed figures may not add to total because of independent rounding.

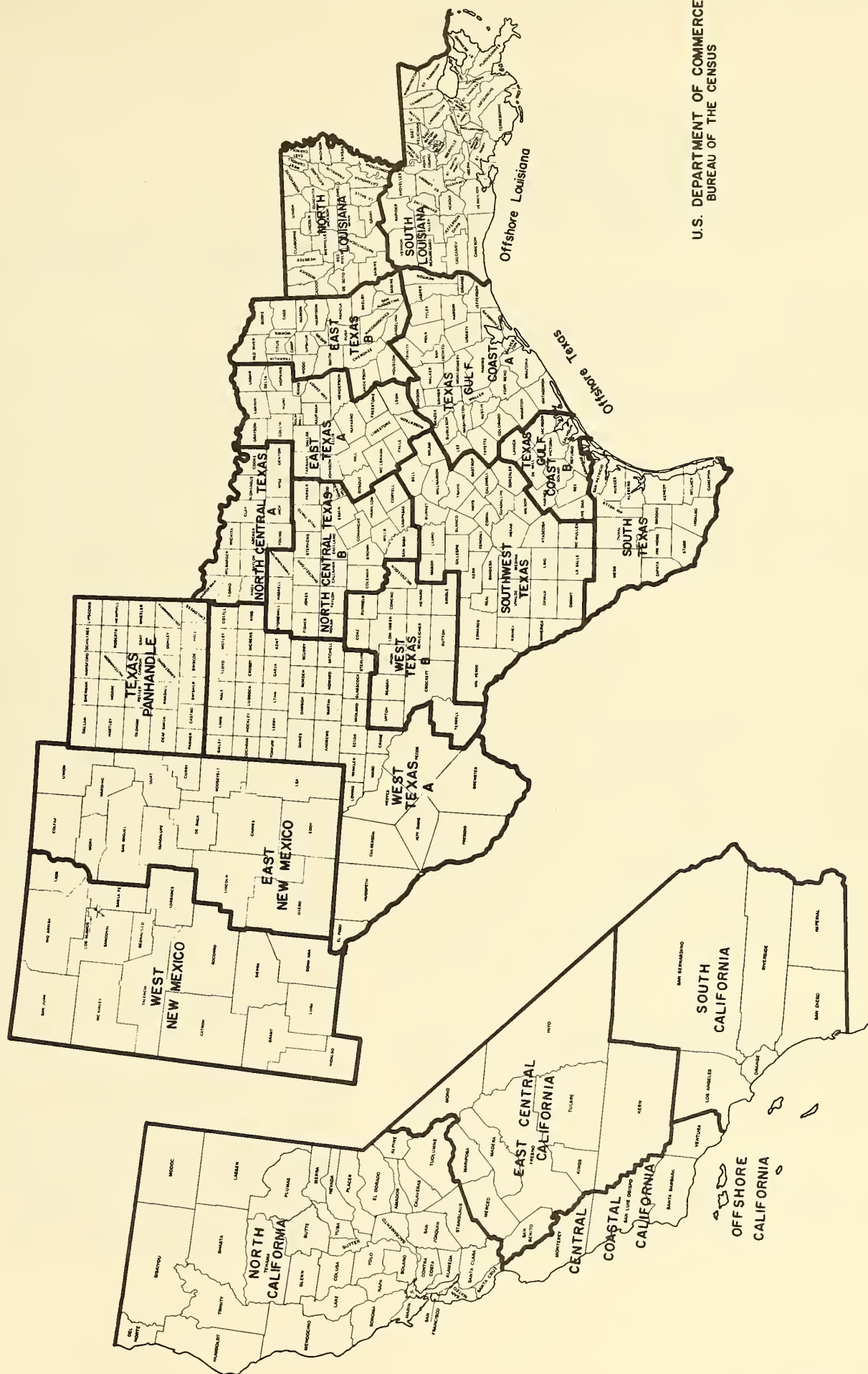
Standard notes: (NA) Not available.

¹For 1967 excludes figures for establishments with less than 5 employees.

²1963 Figure for offshore are included in south Louisiana.

³1963 figures for offshore are included in Texas Gulf Coast A, Texas Gulf Coast B, and South Texas.

1967 CENSUS OF MINERAL INDUSTRIES DISTRICT MAP FOR LOUISIANA, TEXAS, NEW MEXICO, AND CALIFORNIA



U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both “gross” and “net” shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total “value of shipments and receipts” for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

“Value of shipments” used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

“Capital expenditures” used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.



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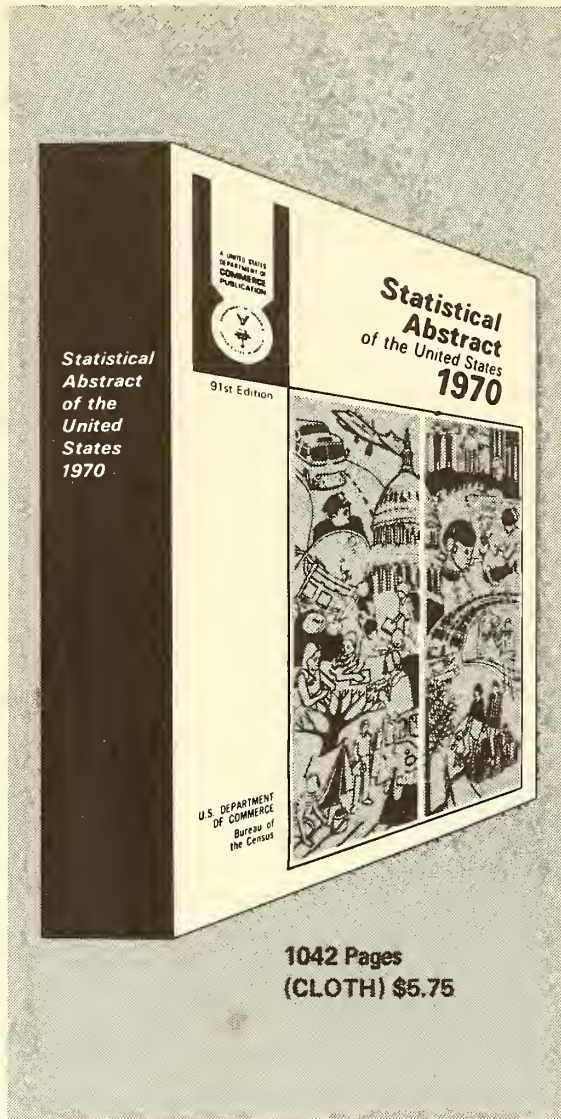
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1967 Census of MINERAL INDUSTRIES



INDUSTRY SERIES

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67(1)-13A

U.S. DEPARTMENT OF COMMERCE / Bureau of the Census

Crude Petroleum and Natural Gas SIC Code 1311

This supplemental report includes tables that were originally intended to be included in the Crude Petroleum and Natural Gas report, MIC67(1)-13A, and therefore retain the original table number sequence of that report. Table 6E shows the number of wells operated, by geographic area; and table 8A presents statistics for operating companies ranked by value of company shipments.

INDUSTRY DESCRIPTION

This report shows 1967 Census of Mineral Industries statistics for establishments classified in industry 1311, Crude Petroleum and Natural Gas. This industry represents establishments primarily engaged in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment; and all other activities incident to making oil and gas marketable up to the point of shipment from the producing property. This industry also includes production of oil through the mining and extraction of oil from oil shale and oil sands. Establishments primarily engaged in performing oil field services for operators on a contract, fee, or other basis are classified in Group 138, Oil and Gas Field Services.

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

For census purposes, a crude petroleum or natural gas establishment covers all oil and gas field activities of an operating company in an entire State or, for Texas, Louisiana, New Mexico, and California, all such activities in one district. Separate reports were required for each State or district in which a company operated.

SUMMARY OF TABLES

The following textual material supplements that included in the original report.

Number of Wells Operated (table 6E). -- The statistics for number of wells operated include data for the 5-percent sample of single-unit companies with less than five employees, except for wells drilled and completed in 1967, and are known to have a varying degree of under-

coverage by geographic area. The large number of small operations and the prevalence of short-term agreements for the operation of oil and gas properties make coverage of this industry by usual census techniques particularly difficult.

Drilling Statistics (table 8A). -- Drilling statistics for the 1967 Census of Mineral Industries cover all multiunit companies and single-unit companies with five or more employees. The original plan was to estimate drilling statistics for single-unit companies with one to four employees from a 5-percent sample of such companies that were mailed regular census schedules. Partial and complete nonresponse from the 5-percent sample resulted in undercoverage which was the primary reason for not publishing drilling statistics for such companies. A comparison of the data reported by these sample companies with other sources also revealed variations in well types, number of wells, and total footages drilled. No attempt was made to obtain coverage for single-unit companies with zero employees since they were out of scope of the census by definition. To supply a link between the drilling data collected in the 1963 and 1967 censuses, a special tabulation of the 1963 census drilling data, excluding data for single-unit establishments with less than five employees, was prepared and is shown in table 6C of the earlier report.

Exploration Expenditures and Gross Book Value of Assets (table 8A). -- These figures were collected on a net working-interest basis on form NC-K13 from crude petroleum and natural gas operators. Companies that did not operate their own working interest were not included. All operating companies with 20 employees or more were included in this survey. Smaller companies were selected on a sample basis. Approximately 92 percent of the exploration expenditures and 93 percent of the gross book value of assets totals were reported directly by respondents. Ratio estimates were made to inflate the 92 and 93 percent direct coverage to an estimated 100 percent of exploration expenditures and gross book value of assets from control and universe totals tabulated from selected operator basis statistics (total value of shipments and total cost of drilling and equipping wells). These net working-interest basis figures are understated to about the same extent that the selected operator basis statistics used in making the estimates are understated.

TABLE 6E. Number of Wells Operated, by Geographic Area: 1967

Geographic area	Producing during December				Shut-in or idle during all of December				Successful wells completed during 1967	
	Oil wells		Gas and gas condensate wells		Oil wells		Gas and gas condensate wells		Oil wells	Gas and gas condensate wells
	1967	1966	1967	1966	1967	1966	1967	1966		
United States, total.....	353,582	357,159	81,126	79,917	60,108	57,969	9,580	10,089	11,033	2,678
Offshore.....	4,367	3,917	753	591	1,038	870	536	531	731	181
Northeast Region.....	16,334	16,790	10,278	10,285	6,508	6,311	756	919	279	181
New York.....	2,954	3,145	592	657	255	218	10	3	75	4
Pennsylvania.....	13,380	13,645	9,686	9,628	6,253	6,093	746	916	204	177
East North Central Division.....	24,193	25,140	2,395	2,444	4,662	4,361	194	105	875	118
Illinois.....	15,940	16,856	83	87	4,118	3,962	30	31	401	1
West North Central Division.....	28,107	28,942	6,126	6,088	3,249	3,324	165	202	892	106
Kansas.....	25,498	26,248	6,068	6,043	2,783	2,829	161	193	817	91
South Atlantic Division.....	5,358	5,321	13,533	13,354	760	558	419	497	104	256
East South Central Division.....	11,399	11,552	5,059	4,995	863	815	255	405	322	116
Kentucky.....	8,820	8,955	4,764	4,671	394	422	159	317	169	106
Mississippi.....	2,217	2,241	295	324	435	342	96	88	152	10
West South Central Division.....	203,042	205,271	33,209	32,517	28,493	27,779	6,665	6,804	5,305	1,552
Offshore.....	3,116	2,863	733	570	831	716	530	527	432	182
Arkansas.....	2,595	2,573	492	455	355	342	146	129	46	61
Louisiana.....	22,192	21,694	7,244	6,987	4,317	4,313	1,963	2,076	1,145	441
North Louisiana.....	9,061	8,987	3,534	3,532	871	900	308	262	254	118
South Louisiana.....	10,053	9,864	3,078	2,932	2,615	2,700	1,143	1,320	474	181
Offshore Louisiana.....	3,078	2,843	632	523	831	713	512	494	417	142
Oklahoma.....	39,885	40,842	6,955	6,549	5,452	5,684	705	792	991	354
Texas.....	138,370	140,162	18,518	18,526	18,369	17,440	3,851	3,807	3,123	696
Texas Gulf Coast A.....	9,915	9,996	1,997	1,995	2,170	2,042	599	629	361	83
Texas Gulf Coast B.....	4,759	4,905	1,639	1,740	698	720	478	465	91	70
South Texas.....	6,881	7,183	2,956	2,945	3,162	2,889	1,480	1,465	224	147
Southwest Texas.....	5,233	5,331	394	382	624	685	210	236	149	17
North Central Texas A.....	18,396	18,681	1,339	1,311	1,889	1,823	105	76	538	73
North Central Texas B.....	7,545	7,880	774	770	987	969	134	141	246	13
East Texas A.....	1,297	1,504	252	267	362	183	65	40	33	22
East Texas B.....	18,988	19,362	1,435	1,454	1,409	1,310	158	142	105	45
West Texas A.....	47,026	47,176	1,620	1,618	5,300	5,229	350	346	876	79
West Texas B.....	7,161	7,061	569	578	1,279	1,206	106	92	343	43
Texas Panhandle.....	11,131	11,063	5,442	5,419	489	381	148	142	142	64
Offshore Texas.....	38	20	101	47	-	3	18	33	15	40
Mountain Division.....	27,100	26,717	9,419	9,139	4,905	4,859	832	899	1,114	281
Montana.....	2,522	2,480	927	905	722	722	55	74	174	5
Wyoming.....	9,349	9,029	803	764	2,398	2,403	293	287	348	37
Colorado.....	1,429	1,409	625	590	306	314	105	124	102	35
New Mexico.....	12,825	12,845	6,877	6,699	1,371	1,321	304	349	424	194
West New Mexico.....	886	903	5,603	5,394	191	189	170	240	39	166
East New Mexico.....	11,939	11,942	1,274	1,305	1,180	1,132	134	109	385	28
Pacific Division.....	38,049	37,426	1,107	1,095	10,668	9,962	294	258	2,142	68
Offshore.....	1,251	1,054	20	21	207	154	6	4	299	1
California.....	37,958	37,368	1,091	1,083	10,643	9,943	269	236	2,101	63
North California.....	96	164	717	686	40	35	140	139	6	47
East Central California.....	22,720	21,996	216	229	6,970	6,557	68	57	1,520	5
Central Coastal California.....	4,945	4,979	40	35	1,200	1,189	4	3	119	6
South California.....	8,992	9,185	98	112	2,236	2,015	51	33	198	4
Offshore California.....	1,205	1,044	20	21	197	147	6	4	258	1
Alaska.....	91	58	16	12	25	19	25	22	41	5
Offshore Alaska.....	46	10	-	-	10	7	-	-	41	-

See footnotes at end of table.

TABLE 6E. Number of Wells Operated, by Geographic Area: 1967--Continued

Geographic area	Purchased, sold, or leased during 1967				Converted to service wells during 1967		Abandoned during 1967	
	Purchased or leased from others		Sold or leased to others					
	Oil wells	Gas and gas condensate wells	Oil wells	Gas and gas condensate wells	Oil wells	Gas and gas condensate wells	Oil wells	Gas and gas condensate wells
United States, total.....	9,340	832	10,682	1,135	3,108	182	8,021	1,492
Offshore.....	-	9	5	5	65	1	43	16
Northeast Region.....	463	-	195	120	57	2	749	229
New York.....	38	-	44	17	-	-	223	45
Pennsylvania.....	425	-	151	103	57	2	526	184
East North Central Division.....	374	16	944	17	189	35	762	42
Illinois.....	273	-	752	2	149	3	533	1
West North Central Division.....	751	43	1,492	85	255	10	806	53
Kansas.....	655	43	1,382	85	168	4	718	52
South Atlantic Division.....	216	54	45	67	14	18	22	124
East South Central Division.....	566	-	663	127	65	5	265	70
Kentucky.....	225	-	307	124	48	3	202	44
Mississippi.....	28	-	32	3	16	2	63	26
West South Central Division.....	5,842	618	6,278	637	1,850	98	4,534	881
Offshore.....	-	7	3	5	29	1	32	16
Arkansas.....	72	1	9	2	16	-	58	6
Louisiana.....	289	105	383	166	127	6	422	229
North Louisiana.....	87	42	62	37	56	-	178	75
South Louisiana.....	202	56	318	124	42	5	212	139
Offshore Louisiana.....	-	7	3	5	29	1	32	15
Oklahoma.....	1,116	209	1,502	120	280	10	1,514	114
Texas.....	4,365	303	4,384	349	1,427	82	2,540	532
Texas Gulf Coast A.....	120	27	110	26	78	8	246	104
Texas Gulf Coast B.....	83	22	215	46	30	9	97	125
South Texas.....	201	81	150	79	64	9	240	114
Southwest Texas.....	188	5	331	9	57	6	108	21
North Central Texas A.....	579	19	647	10	150	3	539	22
North Central Texas B.....	296	29	429	15	126	1	304	29
East Texas A.....	24	1	48	1	28	-	9	12
East Texas B.....	281	75	289	89	23	2	349	32
West Texas A.....	2,110	26	1,887	32	777	41	401	26
West Texas B.....	241	9	201	28	73	2	137	17
Texas Panhandle.....	242	9	77	14	21	1	110	29
Offshore Texas.....	-	-	-	-	-	-	-	1
Mountain Division.....	913	98	796	82	427	12	375	72
Montana.....	15	4	73	1	54	-	20	5
Wyoming.....	574	38	374	15	120	4	113	11
Colorado.....	56	11	66	16	26	-	54	14
New Mexico.....	268	19	265	38	223	8	174	34
West New Mexico.....	37	14	14	18	13	-	64	23
East New Mexico.....	231	5	251	20	210	8	110	11
Pacific Division.....	215	3	269	-	251	2	508	21
Offshore.....	-	2	2	-	36	-	11	-
California.....	215	1	267	-	251	2	508	20
North California.....	2	1	-	-	-	-	71	15
East Central California.....	171	-	187	-	103	2	264	5
Central Coastal California.....	2	-	24	-	57	-	63	-
South California.....	40	-	56	-	55	-	99	-
Offshore California.....	-	-	-	-	36	-	11	-
Alaska.....	-	2	2	-	-	-	-	1
Offshore Alaska.....	-	2	2	-	-	-	-	-

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 8A. Detailed Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1967

Item	All operating companies	Operating companies ranked by value of shipments and receipts								
		First 8 companies	Next 8 (companies 9-16)	Next 8 (companies 17-24)	Next 8 (companies 25-32)	Next 18 (companies 33-50)	First 50 companies	Next 18 (companies 51-68)	Next 32 (companies 69-100)	First 100 companies
DATA REPORTED BY OPERATORS ¹										
Operating companies.....number..	5,482	8	8	8	8	18	50	18	32	100
Establishments.....do....	8,796	517	334	216	144	271	1,482	185	231	1,898
Value of shipments and receipts, total,million dollars..	11,731.7	6,241.2	1,976.5	754.4	394.9	530.8	9,897.8	270.9	246.2	10,414.9
Crude petroleum, including lease condensate, shipped:										
Value.....million dollars..	8,799.6	4,898.8	1,475.0	513.9	216.2	352.4	7,456.3	161.9	144.4	7,762.6
Quantity.....1,000 barrels..	3,043.7	1,646.6	517.0	184.0	79.4	124.8	2,551.8	55.8	51.0	2,658.6
Operator accounts:										
Royalty.....do....	342.7	201.4	45.9	24.2	7.6	15.4	294.5	6.8	5.9	307.2
Other operator accounts.....do....	1,898.6	1,144.8	284.9	97.5	42.0	78.1	1,647.3	31.6	22.8	1,701.7
Accounts of other.....do....	699.9	300.4	163.1	45.6	29.8	31.3	570.2	16.9	21.4	608.5
Undistributed.....do....	102.5	-	23.1	16.7	-	-	39.8	0.5	0.9	41.2
Natural gas shipped:										
Value.....million dollars..	2,887.5	1,340.6	501.0	240.4	178.6	176.9	2,437.5	108.9	93.7	2,640.1
Quantity.....million cu. ft..	17,126.1	7,903.8	3,105.0	1,395.0	1,156.2	817.3	14,377.3	652.1	530.4	15,559.8
Operator accounts:										
Royalty.....do....	2,003.1	998.1	242.8	187.3	148.6	88.8	1,665.6	71.2	73.4	1,810.2
Other operator accounts.....do....	10,673.2	5,247.8	1,867.8	745.2	775.7	600.4	9,236.9	349.9	278.3	9,865.1
Accounts of others.....do....	3,817.2	1,398.9	868.2	408.4	176.5	104.1	2,956.1	224.6	176.4	3,357.1
Undistributed.....do....	632.6	259.0	126.2	54.1	55.4	24.0	518.7	6.4	2.3	527.4
Other products and receipts for										
services.....million dollars..	44.6	1.8	0.5	0.1	0.1	1.5	4.0	0.1	8.2	12.3
Value added in mining.....do....	10,965.0	5,919.2	1,907.7	705.0	371.7	479.2	9,382.8	238.9	217.1	9,838.8
Total employment.....1,000..	126.4	45.3	21.7	7.1	5.7	6.3	86.1	3.5	3.4	93.0
Production, development, and explora- tion workers.....do....	66.2	18.4	10.4	3.8	1.6	3.6	37.8	1.9	2.3	42.0
All other employees.....do....	60.2	26.9	11.3	3.3	4.1	2.7	48.3	1.6	1.1	51.0
Man-hours worked by production, development, and exploration workers, total.....million..										
Operating and maintaining wells.....do....	130.0	38.9	21.3	7.4	3.2	8.2	79.0	3.9	5.3	88.2
Drilling wells and rig building.....do....	108.8	34.4	18.2	5.2	2.9	5.9	66.6	3.7	3.7	74.0
Exploration work (except drilling).....do....	8.6	1.7	0.1	0.4	(Z)	0.7	2.9	(Z)	1.0	3.9
Other work.....do....	7.7	1.8	3.0	1.1	0.3	0.6	6.7	0.2	(Z)	6.9
	4.8	0.9	0.1	0.9	(Z)	1.0	2.9	(Z)	0.5	3.4
Payroll.....million dollars..	1,049.1	438.9	202.4	64.2	45.0	51.3	801.8	26.3	25.3	853.4
Wages of production, development, and exploration workers.....do....	440.3	146.0	83.3	31.9	11.1	24.8	297.1	11.5	14.5	323.1
Salaries of all other employees.....do....	608.8	292.9	119.1	32.3	33.9	26.5	504.7	14.8	10.8	530.3
Supplemental labor costs not included in payrolls ².....do....										
Legally required expenditures, including Social Security contributions.....do....	87.2	36.0	19.6	5.8	2.5	4.8	68.7	2.5	3.3	74.5
Payments for voluntary programs.....do....	32.3	10.0	5.6	2.0	1.1	2.1	20.8	0.9	1.9	23.6
	54.9	26.0	14.0	3.8	1.4	2.7	47.9	1.6	1.4	50.9
Total cost of supplies, etc.....do....	3,308.3	1,714.5	461.3	189.1	148.4	142.6	2,655.9	84.6	65.8	2,806.3
Supplies, gas purchased for gas lift and repressuring, purchased machinery installed, and purchases for resale.....do....	1,634.5	809.4	231.6	98.8	76.7	64.8	1,281.3	46.5	39.3	1,367.1
Purchased fuel and purchased electric energy.....do....	154.0	64.4	28.4	9.5	3.8	7.9	114.0	2.6	3.1	119.7
Contract work.....do....	1,519.8	840.7	201.3	80.8	67.9	69.9	1,260.6	35.5	23.4	1,319.5
Capital expenditures, total.....do....	2,541.6	1,392.5	392.5	139.7	125.2	90.9	2,140.8	52.7	36.6	2,230.1
Mineral development and exploration.....do....	1,372.4	767.3	220.5	74.1	63.5	44.9	1,170.3	26.8	17.2	1,214.3
New structures and additions.....do....	364.8	248.6	39.3	11.6	28.8	16.7	344.9	1.3	1.4	347.6
New machinery and equipment.....do....	759.1	369.4	125.7	50.9	32.6	29.0	607.6	23.5	14.6	645.7
Used plant and equipment.....do....	45.4	7.2	7.0	3.1	0.3	0.4	17.9	1.1	3.4	22.4
Mineral development and exploration expenditures expensed.....do....										
	566.5	215.0	56.0	50.9	34.1	48.4	404.4	17.7	20.9	443.0

See footnotes at end of table.

TABLE 8A. Detailed Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1967—Continued

Item	Operating companies ranked by value of shipments and receipts											
	Next 50 (companies 101-150)	Next 50 (companies 151-200)	First 200 (companies)	Next 50 (com- panies 201-250)	Next 50 (com- panies 251-300)	Next 50 (com- panies 301-350)	Next 50 (com- panies 351-400)	Next 50 (com- panies 401-450)	Next 50 (com- panies 451-500)	Next 300 (com- panies 501-800)	Next 600 (com- panies 801-1400)	All other com- panies
DATA REPORTED BY OPERATORS ¹												
Operating companies.....number..	50	50	200	50	50	50	50	50	50	300	600	4,082
Establishments.....do....	310	193	2,401	190	165	147	144	140	90	487	813	4,219
Value of shipments and receipts, total..million dollars..	243.8	153.5	10,812.2	112.1	90.1	73.0	59.2	49.1	42.5	178.9	168.9	145.7
Crude petroleum, including lease condensate, shipped:												
Value.....million dollars..	175.1	109.3	8,047.0	89.6	74.3	61.2	45.0	36.7	33.5	145.4	140.2	126.7
Quantity.....1,000 barrels..	61.5	39.1	2,759.2	31.4	26.3	20.9	24.6	12.4	12.7	65.9	47.9	42.4
Operator accounts:												
Royalty.....do....	7.1	3.4	317.7	3.2	2.9	2.5	2.5	1.6	1.1	5.1	4.6	1.5
Other operator accounts.....do....	32.9	21.6	1,756.2	13.0	15.7	10.6	9.8	6.6	5.7	27.1	25.6	28.3
Accounts of others.....do....	19.6	12.8	640.9	14.2	7.1	6.1	4.1	3.6	3.5	11.8	8.3	0.3
Undistributed.....do....	1.9	1.3	44.4	1.0	0.6	1.7	8.2	0.6	2.4	21.9	9.4	12.3
Natural gas shipped:												
Value.....million dollars..	61.7	41.0	2,742.8	19.8	14.8	10.2	13.5	10.9	7.1	29.2	25.3	13.9
Quantity.....million cu. ft..	368.9	224.0	16,152.7	126.3	95.6	73.5	92.1	70.5	48.2	205.5	178.4	83.3
Operator accounts:												
Royalty.....do....	45.8	24.7	1,880.7	14.7	11.9	9.9	15.0	10.1	6.3	19.6	24.5	10.4
Other operator accounts.....do....	211.7	120.0	10,196.8	34.7	50.4	30.9	54.8	47.2	18.5	100.6	99.6	39.7
Accounts of others.....do....	101.6	74.6	3,533.3	73.3	30.9	20.6	22.0	12.0	19.2	48.5	34.9	22.5
Undistributed.....do....	9.8	4.7	541.9	3.6	2.4	12.1	0.3	1.2	4.2	36.8	19.4	10.7
Other products and receipts for services.....million dollars..	7.0	3.2	22.5	2.8	1.1	1.7	0.7	1.5	1.8	4.3	3.4	4.8
Value added in mining.....do....	218.6	136.7	10,194.1	93.3	77.7	67.9	49.5	38.7	35.2	146.3	140.0	122.3
Total employment.....1,000..	3.3	2.8	99.1	2.2	1.7	1.5	1.0	1.2	1.0	4.6	5.6	8.5
Production, development, and exploration workers.....do....	2.2	2.0	46.2	1.4	1.0	0.9	0.7	0.8	0.7	3.4	4.0	7.1
All other employees.....do....	1.1	0.8	52.9	0.8	0.7	0.6	0.3	0.4	0.3	1.2	1.6	1.4
Man-hours worked by production, development, and exploration workers, total.....million..	4.5	4.2	96.9	2.4	2.2	1.8	1.4	1.6	1.4	6.5	7.3	8.5
Operating and maintaining wells.....do....	3.3	3.3	80.6	2.2	1.9	1.5	1.1	1.2	1.0	5.4	6.4	7.5
Drilling wells and rig building.....do....	0.9	0.6	5.4	0.2	0.2	0.2	0.1	0.2	0.3	0.8	0.7	0.5
Exploration work (except drilling).....do....	0.1	0.1	7.1	0.1	0.1	(Z)	0.1	(Z)	(Z)	0.1	0.1	0.1
Other work.....do....	0.1	0.2	3.7	(Z)	0.1	(Z)	(Z)	0.2	(Z)	0.2	0.2	0.4
Payroll.....million dollars..	24.5	19.7	897.6	13.9	12.0	9.4	6.6	7.8	5.8	25.8	30.3	39.9
Wages of production, development, and exploration workers.....million dollars..	14.1	12.5	349.7	7.3	6.2	4.8	3.9	4.2	3.7	16.1	18.6	25.8
Salaries of all other employees.....do....	10.4	7.2	547.9	6.6	5.8	4.6	2.7	3.6	2.1	9.7	11.7	14.1
Supplemental labor costs not included in payrolls ².....do....	2.3	1.8	78.6	1.0	0.9	0.6	0.4	0.5	0.4	1.7	1.9	1.2
Legally required expenditures, including Social Security contributions.....do....	1.3	1.0	25.9	0.6	0.5	0.4	0.3	0.3	0.3	1.3	1.6	1.1
Payments for voluntary programs.....do....	1.0	0.8	52.7	0.4	0.4	0.2	0.1	0.2	0.1	0.4	0.3	0.1
Total cost of supplies, etc.....do....	75.5	53.9	2,935.7	46.0	33.6	28.3	19.8	21.7	13.0	75.2	68.1	66.9
Supplies, gas purchased for gas lift and repressuring, purchased machinery installed, and purchases for resale.....do....	41.9	29.3	1,438.3	26.9	17.7	15.4	9.9	10.3	6.9	39.4	35.9	33.8
Purchased fuel and purchased electric energy.....do....	4.3	4.1	128.1	2.6	2.1	1.5	1.6	1.1	1.4	5.5	5.9	4.2
Contract work.....do....	29.3	20.5	1,369.3	16.5	13.8	11.4	8.3	10.3	4.7	30.3	26.3	28.9
Capital expenditures, total.....do....	50.3	37.0	2,317.4	27.1	21.2	23.1	10.2	11.3	5.7	42.6	39.1	43.8
Mineral development and exploration.....do....	28.0	17.3	1,259.6	15.9	8.9	11.8	5.3	5.8	2.0	19.6	19.1	24.4
New structures and additions.....do....	1.5	3.4	352.5	0.8	1.4	0.7	0.2	0.6	0.7	1.7	2.0	4.2
New machinery and equipment.....do....	17.1	15.1	677.8	8.7	9.6	8.9	4.3	4.2	2.2	17.0	13.7	12.7
Used plant and equipment.....do....	3.8	1.3	27.5	1.8	1.3	1.7	0.4	0.7	0.8	4.4	4.3	2.5
Mineral development and exploration expenditures expensed.....do....	16.7	9.0	468.7	8.9	7.3	5.4	4.5	3.5	4.1	18.6	17.5	28.0

See footnotes at end of table.

TABLE 8A. Detailed Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1967—Continued

Item	All operating companies	Operating companies ranked by value of shipments and receipts								
		First 8 companies	Next 8 (companies 9-16)	Next 8 (companies 17-24)	Next 8 (companies 25-32)	Next 18 (companies 33-50)	First 50 companies	Next 18 (companies 51-68)	Next 32 (companies 69-100)	First 100 companies
DATA REPORTED BY OPERATORS ¹ --Continued										
Cost of drilling and equipping wells completed during 1967, total.....million dollars..	2,001.0	974.6	281.2	116.5	102.8	92.3	1,567.4	52.5	36.1	1,656.0
Source of funds:										
Operators.....do....	1,419.6	816.0	179.1	88.7	39.2	67.0	1,190.0	31.2	17.4	1,238.6
Other participating interests.....do....	550.6	157.0	98.8	27.5	62.7	20.7	366.7	20.7	18.6	406.0
Contributors.....do....	16.8	1.6	3.3	0.2	1.0	1.3	7.4	0.4	0.1	7.9
Undistributed.....do....	14.0	-	-	-	-	3.3	3.3	0.2	-	3.5
Wells drilled and completed, except those drilled on contract for others, total:										
Drilled.....number..	20,350	4,970	2,115	968	635	1,232	9,920	615	658	11,193
Footage drilled.....1,000 ft..	104,082	33,191	11,025	5,556	3,683	5,809	59,264	3,761	3,269	66,294
Cost of drilling and equipping.....million dollars..	2,001.0	974.6	281.2	116.5	102.8	92.3	1,567.4	52.5	36.1	1,656.0
Oil wells:										
Drilled.....number..	10,474	2,992	1,225	459	387	605	5,668	222	286	6,176
Footage drilled.....1,000 ft..	47,024	16,332	4,961	1,896	2,024	2,106	27,319	1,083	1,471	29,873
Cost of drilling and equipping.....million dollars..	937.1	470.3	108.7	37.1	68.5	35.3	719.8	13.9	16.4	750.1
Gas and gas condensate wells:										
Drilled.....number..	2,515	543	282	181	124	267	1,397	122	117	1,636
Footage drilled.....1,000 ft..	17,627	5,543	2,484	1,442	880	1,588	11,937	886	563	13,386
Cost of drilling and equipping.....million dollars..	460.0	201.6	84.4	39.8	21.4	25.9	373.2	18.9	9.3	401.4
Dry holes:										
Drilled.....number..	6,328	1,197	388	276	97	316	2,274	249	190	2,713
Footage drilled.....1,000 ft..	36,653	10,440	2,975	2,084	655	2,021	18,175	1,739	1,168	21,082
Cost of drilling and equipping.....million dollars..	566.2	282.8	82.0	37.9	9.3	30.3	442.4	19.0	10.0	471.4
Service wells:										
Drilled.....number..	1,033	238	220	52	27	44	581	22	65	668
Footage drilled.....1,000 ft..	2,778	876	605	134	124	94	1,833	53	67	1,953
Cost of drilling and equipping.....million dollars..	37.8	19.9	6.1	1.6	3.6	0.8	32.0	0.7	0.4	33.1
Wells drilled and completed on contract for others:										
Drilled.....number..	1,239	-	-	-	-	(D)	(D)	-	(D)	204
Footage drilled.....1,000 ft..	5,617	-	-	-	-	(D)	(D)	-	(D)	1,466
Cost of drilling and equipping.....million dollars..	22.7	-	-	-	-	(D)	(D)	-	(D)	7.4
DATA REPORTED ON A NET WORKING-INTEREST BASIS ³										
Gross book value of oil and gas field assets at end of 1967, total.....million dollars..	36,970.6	19,276.8	6,554.8	2,795.9	1,145.0	1,645.9	31,418.4	787.2	872.2	33,077.8
Mineral properties (lease hold investment):										
Nonproducing properties.....million dollars..	2,798.9	1,489.6	555.1	238.0	61.6	110.7	2,455.0	58.1	37.5	2,550.6
Producing properties.....do....	18,752.5	9,376.0	3,079.8	1,615.3	693.1	1,070.9	15,835.1	468.6	481.0	16,784.7
Work in progress.....do....	516.3	176.7	56.4	179.6	36.0	18.6	467.3	22.9	5.2	495.4
Buildings, other structures, and machinery (excluding land).....do....	14,903.0	8,234.5	2,863.5	763.0	354.3	445.7	12,661.0	237.6	348.4	13,247.0
Exploration expenditures (expensed and capitalized), total.....do....	2,251.7	1,002.9	407.0	189.2	48.4	142.1	1,789.6	57.7	45.3	1,892.6
Lease and land acquisition of nonproducing acreage.....do....	786.4	391.2	188.9	62.7	11.1	46.6	700.5	10.0	9.5	720.0
Lease rents.....do....	120.9	49.5	23.4	11.5	3.9	8.5	96.8	2.6	3.0	102.4
Land department, leasing and accounting.....do....	74.5	29.1	15.3	8.9	4.3	5.4	63.0	1.3	1.4	65.7
Geological and geophysical.....do....	355.0	234.5	62.3	24.9	2.8	9.2	333.7	3.2	1.8	338.7
Drilling and equipping wells:										
Dry.....do....	373.3	148.5	58.3	22.2	7.8	25.6	262.4	12.3	10.2	284.9
Successful.....do....	336.6	55.1	29.3	33.3	13.5	36.1	167.3	19.7	14.4	201.4
In progress.....do....	93.5	52.5	7.3	9.3	2.6	7.3	79.0	2.8	1.6	83.4
Contributions paid.....do....	18.0	9.4	3.6	0.6	0.4	0.4	14.4	0.2	0.1	14.7
Other.....do....	93.2	33.1	18.4	15.9	1.9	2.9	72.2	5.7	3.4	81.3

TABLE 8A. Detailed Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1967--Continued

Item	Operating companies ranked by value of shipments and receipts											
	Next 50 (companies 101-150)	Next 50 (companies 151-200)	First 200 companies	Next 50 (com- panies 201-250)	Next 50 (com- panies 251-300)	Next 50 (com- panies 301-350)	Next 50 (com- panies 351-400)	Next 50 (com- panies 401-450)	Next 50 (com- panies 451-500)	Next 300 (com- panies 501-800)	Next 600 (com- panies 801-1400)	All other com- panies
DATA REPORTED BY OPERATORS ¹ --Continued												
Cost of drilling and equipping wells completed during 1967, total.....million dollars..	48.1	33.6	1,737.7	36.0	23.8	27.6	14.1	15.7	8.7	51.2	60.0	26.2
Source of funds:												
Operators.....do....	27.9	17.3	1,283.8	14.0	13.7	12.5	7.7	7.8	3.7	20.2	41.8	14.4
Other participating interests.....do....	14.9	14.9	435.8	20.2	9.1	14.7	5.9	6.9	3.4	27.3	16.3	11.0
Contributors.....do....	2.1	1.4	11.4	1.1	0.1	0.4	0.1	(Z)	0.7	0.3	1.9	0.8
Undistributed.....do....	3.2	-	6.7	0.7	0.9	-	0.4	1.0	0.9	3.4	-	-
Wells drilled and completed, except those drilled on contract for others, total:												
Drilled.....number..	818	739	12,750	869	616	585	415	426	355	1,595	1,728	1,011
Footage drilled.....1,000 ft..	4,615	3,353	74,262	3,934	2,707	2,986	1,795	1,674	1,231	6,366	6,277	2,850
Cost of drilling and equipping.....million dollars..	48.1	33.6	1,737.7	35.4	23.8	27.6	14.1	15.7	8.7	51.2	60.0	26.2
Oil wells:												
Drilled.....number..	370	341	6,887	477	275	306	163	146	156	763	830	471
Footage drilled.....1,000 ft..	1,988	1,352	33,213	2,119	1,150	1,497	669	584	523	3,007	2,953	1,309
Cost of drilling and equipping.....million dollars..	23.5	17.2	790.8	21.9	12.6	16.4	6.6	6.2	4.3	27.2	39.9	11.2
Gas and gas condensate wells:												
Drilled.....number..	126	90	1,852	54	31	29	43	81	13	153	139	120
Footage drilled.....1,000 ft..	819	426	14,631	331	196	206	245	305	54	705	624	330
Cost of drilling and equipping.....million dollars..	10.9	5.9	418.2	3.9	3.6	3.4	2.8	3.9	0.5	10.1	4.7	8.9
Dry holes:												
Drilled.....number..	271	280	3,264	302	304	221	198	188	146	608	684	413
Footage drilled.....1,000 ft..	1,618	1,535	24,235	1,411	1,342	1,166	868	769	586	2,480	2,593	1,203
Cost of drilling and equipping.....million dollars..	12.7	10.1	494.2	9.7	7.4	7.6	4.6	5.4	3.5	12.8	14.7	6.3
Service wells:												
Drilled.....number..	51	28	747	36	6	29	11	11	40	71	75	7
Footage drilled.....1,000 ft..	190	40	2,183	73	19	117	13	16	68	174	107	8
Cost of drilling and equipping.....million dollars..	1.0	0.4	34.5	0.5	0.2	0.2	0.1	0.2	0.4	1.1	0.7	(Z)
Wells drilled and completed on contract for others:												
Drilled.....number..	146	105	455	21	23	67	14	114	170	231	97	47
Footage drilled.....1,000 ft..	950	637	3,053	116	108	293	64	352	402	734	330	165
Cost of drilling and equipping.....million dollar...	4.8	2.1	14.2	0.6	0.4	0.8	0.6	1.2	1.1	2.3	1.0	0.5
DATA REPORTED ON A NET WORKING-INTEREST BASIS ³												
Gross book value of oil and gas field assets at end of 1967, total.....million dollars..	804.2	454.4	34,336.4	275.8	283.2	133.7	133.6	239.4	113.8	520.4	517.2	417.1
Mineral properties (lease hold investment):												
Nonproducing properties.....million dollars..	62.8	24.5	2,637.9	18.2	14.6	8.6	12.9	14.3	19.4	27.9	19.6	25.5
Producing properties.....do....	430.4	224.9	17,440.0	145.1	153.2	73.8	65.2	115.1	49.1	229.4	273.8	207.8
Work in progress.....do....	11.1	3.0	509.5	0.8	0.2	0.8	0.3	0.8	0.1	1.6	1.0	1.1
Buildings, other structures, and machinery (excluding land).....do....	300.0	202.0	13,749.0	111.7	115.2	50.5	55.2	109.3	45.2	261.4	222.8	182.7
Exploration expenditures (expensed and capitalized), total.....do....	57.7	42.0	1,992.3	119.2						114.4		25.8
Lease and land acquisition of nonproducing acreage.....do....	10.9	6.4	737.3	28.8						15.4		4.9
Lease rents.....do....	4.8	2.8	110.0	5.2						4.5		1.1
Land department, leasing and accounting.....do....	1.9	1.0	68.6	2.4						2.8		0.6
Geological and geophysical.....do....	4.8	1.0	344.5	5.3						4.2		1.0
Drilling and equipping wells:												
Dry.....do....	11.2	10.8	306.9	28.3						31.5		6.6
Successful.....do....	17.8	15.2	234.4	43.7						48.2		10.2
In progress.....do....	4.1	1.0	88.5	2.0						2.5		0.5
Contributions paid.....do....	0.2	0.2	15.1	1.3						1.3		0.3
Other.....do....	2.0	3.6	86.9	1.6						4.1		0.6

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than .05 million.

¹Represents figures obtained from operators of oil and gas field properties. Each report includes data for properties operated both for the account of the reporting company and for properties operated for others, but excludes data for properties owned by the reporting company but operated by others.

²Excludes supplemental labor costs for employees reported on central administrative office and auxiliary unit report form NC-X6. The wages and salaries paid such employees are included in the "payroll" figures shown above.

³Represents figures obtained from operators of oil and gas field properties on a net working-interest basis; thus each report includes only data for properties owned by the company, but includes such properties whether or not they are operated by the company.

A table 8B, "Detailed Statistics for Operating Companies, by Geographic Area: 1967" was originally announced for inclusion in this supplemental report. This table was intended to show data reported on a net working-interest basis and would have provided operator statistics in the same format for comparative purposes. However, it was not feasible to publish data reported on a net working-interest basis. Data reported on an operator basis are available by geographic area from table 3A of MIC67(1)-13A.

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Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	4
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	5
3A Detailed Statistics, by Selected Geographic Area: 1967	7
3B Detailed Statistics, by Selected Types of Operations: 1967	10
4 General Statistics, by Employment Size of Establishment: 1967	11
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	11
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	12
7 Selected Supplies, Natural Gas Received for Processing, Natural Gas Liquids Received for Further Processing, Purchased Machinery Installed, and Fuels Used by Geographic Area: 1967 and 1963	14
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

NATURAL GAS LIQUIDS

INDUSTRY DESCRIPTION

This report shows 1967 Census of Mineral Industries statistics for establishments classified in industry 1321, Natural Gas Liquids. This industry represents establishments primarily engaged in producing liquid hydrocarbons from oil and gas field gases. Establishments recovering liquefied petroleum gases incident to petroleum refining or to the manufacturing of chemicals are classified in Major Groups 28 or 29.

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

Figures are also shown in tables 1, 2, 3B, and 4 of this report for the three subindustries, Natural Gasoline, Cycle Condensate, and Fractionating. The Natural Gasoline Subindustry represents establishments primarily engaged in producing natural gasoline and liquefied petroleum gases from natural gas. The Cycle Condensate Subindustry represents establishments primarily engaged in producing cycle condensate and derived liquids at establishments cycling the natural gas back into the ground. The Fractionating Subindustry represents establishments engaged principally in fractionating natural gas liquids received from other establishments. For census purposes, distinction between the three subindustries was based on the respondent's reply to a check-box inquiry asking for type of plant as either "natural gasoline plant," "cycle condensate plant," or "fractionating plant."

This report does not include the recovery of natural gas liquids as a secondary activity in dehydration, pressure maintenance, and boosting plants. Insofar as such operations are associated with natural gas transmissions lines, they are not within the scope of the 1967 economic censuses (manufactures, mineral industries, and business). Also excluded from this report is the production of liquefied gases from petroleum refinery gases. Such production is included in the 1967 Census of Manufactures report, "Petroleum Refining and Related Industries." In 1967, the net shipments of natural gas liquids by the natural gas liquids industry was 497.1 million barrels.

For the subindustry Natural Gasoline, statistics are shown in tables 2 and 3B for establishments classified by method of recovery of natural gas liquids, separate figures being shown where possible for the methods of recovery: "absorption," "compression," "refrigeration," "charcoal and other," and "combination." These classifications were also based on a check-box inquiry in the report form.

SUMMARY OF FINDINGS

The total value of shipments and receipts of the Natural Gas Liquids Industry amounted to \$3,707.6 million. Of this total, the value of shipments of natural gas liquids amounted to \$1,251.6 million, and the value of residue gas shipped to \$2,431.6 million. The Natural Gasoline Subindustry accounted for \$3,295.0 million of the total value of shipments and receipts, the Cycle Condensate Subindustry for \$243.4 million, and the Fractionating Subindustry for \$169.2 million.

Net shipments of natural gas liquids are shown in several places in this report. The value of net shipments, amounting to \$1,122 million, was obtained by subtracting the value of natural gas liquids and crude petroleum received for processing (\$173 million) from

the value of gross shipments of natural gas liquids (\$1,296 million). Similarly, quantity of net liquids production and net liquids shipments was obtained by subtraction of quantity receipts of liquids from the gross quantity of production or shipments. These net figures avoid the duplication in gross production and shipments figures resulting from transfers of liquids from other plants in the same industry to associated plants or to a central fractionator and from some receipts of crude petroleum for processing.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry and sub-industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries and subindustries of the primary products of the specified industry. The extent of the "product mix" is indicated in tables 3A, 3B, and 5 which show the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of natural gas liquids.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Natural Gas Liquids Industry are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

1. The Bureau of Mines includes statistics for some liquids recovered incident to the operation of gathering and transmission lines. Such liquids are not classified as natural gas liquids in Census Bureau reports.
2. Although a separate report was requested by the Census Bureau for each natural gas liquids plant, in reporting unitized operations some flexibility was permitted. If it was particularly difficult for the operator to prepare separate reports for each plant, a consolidated report was accepted, provided it did not include operations in more than one county. The acceptance of such consolidated reports explains some of the differences between the counts of number of establishments as shown in Census and Mines reports.
3. The Bureau of Mines includes statistics for some liquids produced and consumed within establishments included in the Census of Manufactures.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production (quantity)	Shipments (including inter-plant transfers) or receipts		Production (quantity)	Shipments or receipts	Value (\$1,000)
			Quantity	Value (\$1,000)			
Net natural gas liquids production and shipments.....	1,000 barrels.	498,000	497,100	1,122,200	514,456	489,720	¹ 1,179,936
Natural gas received for processing.....	Million cu. ft..	(X)	16,002,200	2,569,300	(X)	15,641,633	(NA)
Residue gas:							
Shipped.....	....do....	(X)	14,395,800	2,431,600	(X)	² 14,298,990	(NA)
Used for fuel at plant.....	....do....	504,000	(X)	(X)	522,171	(X)	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

¹Represents value of production.

²Represents "returned to formation," "shipped to transmission companies," "direct deliveries to consumers," and "unaccounted for."

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)		(million dollars)
INDUSTRY 1321.--NATURAL GAS LIQUIDS									
1967.....	(NA)	684	216	12.4	99.5	10.5	21.0	82.1	905.0
1963.....	164	652	245	13.9	96.6	11.9	24.5	80.7	762.1
1958.....	176	593	290	16.5	96.3	13.4	26.9	75.7	587.6
1954.....	181	562	287	17.3	85.1	13.6	27.9	64.0	(NA)
1939.....	295	³ 736	(NA)	10.3	18.3	8.3	16.6	13.2	(NA)
Selected expenses									
	Supplies, purchased fuels, and electricity and contract work	Natural gas received for processing	Natural gas liquids and crude petroleum received for processing	Purchased machinery installed	Value of shipments and receipts	Value of net shipments and receipts ¹	Quantity of net production of natural gas liquids ²	Capital expenditures	
	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million barrels)	(million dollars)	
1967.....	170.2	2,569.3	173.4	104.0	3,707.6	1,102.6	498.0	214.4	
1963.....	157.6	1,841.3	114.6	39.1	2,800.8	808.5	398.9	113.9	
1958.....	100.2	1,850.4	142.0	39.8	1,625.1	706.9	294.2	94.9	
1954.....	85.8	(NA)	57.6	65.8	(NA)	582.9	255.5	110.0	
1939.....	19.6	(NA)	(NA)	(NA)	(NA)	96.3	60.8	(NA)	

Standard notes: (NA) Not available.

¹Represents value of gross shipments and receipts less value of residue gas shipped and less cost of natural gas liquids and crude petroleum received for processing.²Represents gross production less natural gas liquids received for processing.³Represents number of plants.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1321. --NATURAL GAS LIQUIDS													
United States, total.....	684	216	12.4	99.5	10.5	21.0	82.1	905.0	3,016.9	3,707.6	214.4	13.9	762.1
Producing establishments.....	671	216	12.4	99.4	10.5	21.0	82.0	903.6	3,001.2	3,707.6	197.2	13.9	762.6
Natural gasoline, total.....	606	194	10.7	84.4	9.4	18.7	73.1	797.8	2,657.8	3,295.0	160.7	11.9	632.3
Absorption.....	315	121	6.2	49.2	5.5	11.0	43.0	417.4	1,213.4	1,575.4	55.4	8.5	375.7
Compression.....	11	3	0.2	1.2	0.2	0.3	1.1	13.4	16.4	28.4	1.4	0.2	4.3
Refrigeration.....	76	9	0.8	5.6	0.6	1.3	4.8	39.4	150.8	184.0	6.2	0.4	70.0
Charcoal or other.....	19	-	0.1	0.8	0.1	0.2	0.7	5.2	140.9	144.9	1.2	(Z)	2.5
Combination.....	185	61	3.4	27.6	2.9	6.0	23.4	322.5	1,136.4	1,362.2	96.6	2.8	179.8
Cycle condensate.....	36	10	0.9	7.2	0.8	1.5	5.9	80.5	190.8	243.4	27.9	1.6	120.3
Fractionating.....	17	9	0.4	3.5	0.3	0.7	2.9	25.3	152.6	169.2	8.6	0.3	10.0
Undistributed.....	12	3	0.4	4.2	-	-	-	-	-	-	-	(NA)	(NA)
Nonproducing establishments.....	13	-	(Z)	0.1	(Z)	(Z)	0.1	1.4	15.7	-	17.1	(Z)	(1)
SOUTH REGION, TOTAL.....	522	170	9.8	78.5	8.1	16.3	63.2	752.2	2,374.5	2,946.0	180.6	(NA)	(NA)
Producing establishments.....	511	170	9.8	78.4	8.1	16.3	63.1	750.7	2,360.3	2,946.0	165.1	(NA)	(NA)
Natural gasoline.....	458	150	8.2	64.9	7.2	14.3	55.6	654.0	2,065.7	2,587.3	132.4	(NA)	(NA)
Absorption.....	238	93	4.7	37.3	4.2	8.4	32.3	337.7	933.0	1,232.7	38.0	(NA)	(NA)
Compression.....	7	3	0.1	1.1	0.1	0.3	1.0	12.9	13.3	25.9	0.3	(NA)	(NA)
Refrigeration.....	53	7	0.6	4.0	0.5	1.0	3.4	32.1	108.8	136.8	4.1	(NA)	(NA)
Combination.....	144	47	2.7	21.8	2.3	4.6	18.2	266.7	943.3	1,120.9	89.1	(NA)	(NA)
Cycle condensate.....	29	9	0.8	6.3	0.7	1.3	5.1	77.3	167.2	217.6	27.0	(NA)	(NA)
Fractionating.....	13	8	0.7	6.9	0.3	0.5	2.1	17.8	119.1	131.6	5.4	(NA)	(NA)
Nonproducing establishments.....	11	-	(Z)	0.1	(Z)	(Z)	0.1	1.4	14.1	-	15.5	(NA)	(NA)
West South Central Division, total.....	499	162	9.4	75.8	7.8	15.7	60.9	718.8	2,212.7	2,753.7	177.9	10.2	587.9
Producing establishments.....	491	162	9.4	75.7	7.8	15.7	60.9	717.4	2,198.7	2,753.7	162.4	10.2	588.5
Natural gasoline.....	393	133	7.3	58.1	6.4	12.8	49.9	582.6	1,736.9	2,195.9	123.6	8.6	463.0
Absorption.....	227	89	4.6	36.2	4.0	8.1	31.3	320.5	850.3	1,135.3	35.6	6.1	276.0
Refrigeration.....	48	5	0.5	3.2	0.4	0.8	2.7	24.9	42.7	63.7	3.9	0.2	56.0
Nonproducing establishments.....	8	-	(Z)	0.1	(Z)	(Z)	0.1	1.4	14.0	-	15.4	(Z)	(1)
Louisiana, total.....	98	25	1.4	11.6	1.2	2.5	9.6	152.4	950.9	1,040.7	62.6	1.5	154.9
Producing establishments.....	93	25	1.4	11.5	1.2	2.5	9.5	152.3	939.5	1,040.7	51.1	(NA)	(NA)
Natural gasoline.....	79	21	1.2	9.5	1.0	2.1	8.0	129.6	867.7	950.7	46.7	(NA)	(NA)
Absorption.....	39	9	0.5	4.2	0.5	1.0	3.7	43.4	286.9	322.7	7.6	(NA)	(NA)
Nonproducing establishments.....	5	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	11.3	-	11.5	(NA)	(NA)
North Louisiana.....	29	6	0.5	3.4	0.4	0.8	2.9	23.8	104.9	127.9	0.9	0.6	22.9
Natural gasoline.....	23	4	0.3	2.3	0.3	0.6	2.0	14.4	71.9	85.7	0.5	(NA)	(NA)
South Louisiana.....	69	19	1.0	8.1	0.8	1.7	6.7	128.6	846.0	912.8	61.7	0.9	131.9
Natural gasoline.....	56	17	0.9	7.3	0.7	1.5	6.0	115.3	795.8	864.9	46.2	(NA)	(NA)
Texas, total.....	313	110	6.3	51.2	5.4	10.9	42.9	474.9	1,117.5	1,490.1	102.3	6.9	380.8
Natural gasoline.....	283	101	5.5	43.9	4.8	9.6	37.8	410.0	915.2	1,253.0	72.3	(NA)	(NA)
Absorption.....	144	65	3.3	25.9	2.9	5.7	22.5	223.6	488.7	690.4	21.9	(NA)	(NA)
Fractionating.....	6	4	0.2	1.5	0.1	0.3	1.3	11.8	79.1	89.8	1.1	(NA)	(NA)
Texas Gulf Coast A.....	50	20	1.1	9.5	0.9	1.9	7.7	99.1	302.2	391.7	9.6	1.1	85.4
Texas Gulf Coast B.....	24	6	0.3	2.5	0.3	0.6	2.4	22.1	84.6	102.5	4.2	0.4	18.7
South Texas.....	41	11	0.9	7.1	0.8	1.6	6.3	58.5	228.4	254.2	32.7	0.9	63.5
Southwest Texas.....	6	1	0.1	0.6	0.1	0.1	0.5	3.6	15.7	19.1	0.2	0.1	2.4
North Central Texas A.....	15	3	0.2	1.6	0.2	0.3	1.4	20.5	15.6	31.9	4.2	0.3	9.6
North Central Texas B.....	26	6	0.4	3.3	0.3	0.7	2.4	11.8	18.5	28.3	2.0	0.4	10.1
East Texas A.....	11	3	0.2	1.3	0.2	0.3	1.2	14.2	28.4	39.9	2.7	0.1	9.1
East Texas B.....	29	13	0.6	4.6	0.5	1.0	4.0	41.1	78.4	117.8	1.7	0.8	25.0
West Texas A.....	63	31	1.6	13.4	1.4	2.8	11.2	123.5	162.7	250.5	35.7	1.6	93.0
West Texas B.....	19	6	0.3	2.6	0.3	0.6	2.2	18.3	34.8	50.4	2.7	0.4	11.2
Texas Panhandle.....	29	10	0.6	4.8	0.4	0.9	3.6	62.1	148.4	203.9	6.6	0.9	52.8

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	INDUSTRY 1321. --NATURAL GAS LIQUIDS--Continued												
WEST REGION, TOTAL.....	125	39	2.2	17.4	2.0	3.9	15.8	95.3	411.8	481.1	26.0	2.5	111.1
Natural gasoline.....	114	37	2.0	15.8	1.8	3.6	14.4	92.9	375.5	448.4	21.6	(NA)	(NA)
Absorption.....	60	25	1.3	10.4	1.2	2.3	9.5	61.5	222.2	269.5	14.2	1.8	66.8
Combination.....	30	10	0.5	4.0	0.5	0.9	3.6	25.2	129.9	152.4	4.2	0.4	38.5
Mountain Division.....	74	26	1.4	10.7	1.2	2.4	9.8	56.7	258.1	293.8	20.9	1.2	47.2
Natural gasoline.....	67	25	1.3	9.7	1.1	2.3	9.0	55.8	232.4	269.4	18.8	(NA)	(NA)
Absorption.....	36	18	0.9	7.0	0.8	1.6	6.6	42.3	161.6	190.7	13.2	0.8	32.2
Combination.....	17	6	0.3	2.1	0.2	0.5	1.8	10.3	58.2	65.6	2.9	0.2	13.1
Wyoming.....	19	3	0.3	2.0	0.2	0.5	1.9	9.0	40.2	48.5	0.8	0.2	8.6
Natural gasoline.....	16	3	0.2	1.8	0.2	0.4	1.7	7.8	37.7	44.8	0.7	(NA)	(NA)
Colorado.....	11	3	0.1	0.9	0.1	0.2	0.8	3.2	15.5	18.4	0.3	(NA)	(NA)
New Mexico.....	36	20	0.9	7.3	0.8	1.7	6.6	41.3	191.9	214.5	18.7	0.8	31.3
Pacific Division.....	51	13	0.8	6.7	0.7	1.4	6.0	38.6	153.8	187.4	5.1	1.3	63.9
Natural gasoline.....	47	12	0.7	6.1	0.7	1.3	5.4	37.1	143.2	179.0	2.8	(NA)	(NA)
Absorption.....	24	7	0.4	3.1	0.4	0.7	3.0	19.2	60.5	78.7	1.0	1.0	34.6
Combination.....	13	4	0.2	1.9	0.2	0.1	1.8	14.8	63.5	77.2	1.1	0.2	25.4

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (NA) Not available. (Z) Represents less than one-half of the unit of measure specified undistributed. - Represents data for separately operated central administrative offices which were not classified by type of operation.

¹Not shown since the cost of supplies etc., and purchased machinery installed is greater than the sum of the value of shipments and capital expenditures.²Includes data for separately operated administrative offices.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	United States, total	South Region						
		Total	West South Central Division					
			Total	Louisiana			Texas	
				Total	North Louisiana	South Louisiana	Total	Texas Gulf Coast A
Establishments, total.....number..	684	522	499	98	29	69	313	50
With 1 to 19 employees.....do....	468	352	337	73	23	50	203	30
With 20 to 99 employees.....do....	209	163	155	25	6	19	105	19
With 100 employees or more.....do....	7	7	7	-	-	-	5	1
All employees (average for the year).....1,000..	12.4	9.8	9.4	1.4	0.5	1.0	6.3	1.1
Payroll (all employees), total for year..million dollars..	99.5	78.5	75.8	11.6	3.4	8.1	51.2	9.5
Production, development, and exploration workers:								
Average for the year.....1,000..	10.5	8.1	7.8	1.2	0.4	0.8	5.4	0.9
March.....do....	10.4	8.1	7.7	1.2	0.4	0.8	5.4	0.9
May.....do....	10.4	8.0	7.8	1.2	0.4	0.8	5.4	0.9
August.....do....	10.6	8.1	7.9	1.2	0.4	0.8	5.5	1.0
November.....do....	10.4	8.3	7.8	1.2	0.4	0.9	5.4	0.9
Man-hours.....millions..	21.0	16.3	15.7	2.5	0.8	1.7	10.9	1.9
Wages.....million dollars..	82.1	63.2	60.9	9.6	2.9	6.7	42.9	7.7
Supplemental labor cost not included in payroll.....do....	12.2	9.5	9.1	1.5	0.4	1.1	6.4	1.3
Legally required expenditures, including Social Security contributions.....do....	4.4	3.4	3.3	0.5	0.2	0.3	2.3	0.5
Payments for voluntary program.....do....	7.9	6.1	5.8	1.0	0.2	0.8	4.0	0.8
Cost of supplies, etc., total.....do....	3,016.9	2,374.5	2,212.7	950.9	104.9	846.0	1,117.5	302.2
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	2,946.9	2,320.3	2,162.6	931.5	104.0	827.6	1,091.5	294.0
Cost of resales.....do....	(Z)	(Z)	(Z)	-	-	-	(Z)	-
Purchased fuels consumed.....do....	11.8	8.2	6.7	2.2	0.5	1.6	3.4	1.5
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	1,032.7	832.1	803.1	167.7	13.0	154.7	553.3	166.8
Cost.....million dollars..	11.0	8.4	8.1	1.6	0.2	1.4	5.4	1.4
Generated less sold.....million kw.-hrs..	1,424.1	1,192.8	1,184.8	138.2	34.1	104.0	815.1	145.7
Contract work.....million dollars..	47.2	37.5	35.4	15.6	0.2	15.6	17.2	5.3
Value of shipments and receipts (including resales), total.....do....	3,707.6	2,946.0	2,753.7	1,040.7	127.9	912.8	1,490.1	391.7
Value of resales.....do....	(Z)	(Z)	(Z)	-	-	-	(Z)	-
Value added in mining.....do....	905.0	752.2	718.8	152.4	23.8	128.6	474.9	99.1
Capital expenditures (except land and mineral rights), total.....do....	214.4	180.6	177.9	62.6	0.9	61.7	102.3	9.6
Mineral development and exploration.....do....	-	-	-	-	-	-	-	-
New structures and additions.....do....	112.7	99.9	97.5	43.3	0.4	42.9	49.8	6.5
New machinery and equipment.....do....	98.8	78.6	78.3	18.9	0.3	18.6	51.2	2.8
Used plant and equipment.....do....	2.8	2.1	2.1	0.4	0.1	0.3	1.2	0.3
Gross book value of fixed assets, total.....do....	2,603.2	2,092.9	1,998.7	406.4	61.2	345.2	1,368.3	265.7
Mineral properties.....do....	-	-	-	-	-	-	-	-
Building and other structures (excluding land).....do....	654.5	526.8	511.2	84.0	22.2	61.8	370.8	83.0
Machinery and equipment.....do....	1,948.8	1,566.1	1,487.5	322.4	39.0	283.4	997.5	182.7

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967-Continued

Item	South Region--Continued							
	West South Central Division--Continued							
	Texas--Continued							
	Texas Gulf Coast B	South Texas	Southwest Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas A
Establishments, total.....number..	24	41	6	15	26	11	29	63
With 1 to 19 employees.....do....	18	30	5	12	20	8	16	32
With 20 to 99 employees.....do....	6	9	1	3	6	3	13	30
With 100 employees or more.....do....	-	2	-	-	-	-	-	1
All employees (average for the year).....1,000..	0.3	0.9	0.1	0.2	0.4	0.2	0.6	1.6
Payroll (all employees), total for year..million dollars..	2.5	7.1	0.6	1.6	3.3	1.3	4.6	13.4
Production, development, and exploration workers:								
Average for the year.....1,000..	0.3	0.8	0.1	0.2	0.3	0.2	0.5	1.4
March.....do....	0.3	0.8	0.1	0.2	0.3	0.1	0.5	1.4
May.....do....	0.3	0.8	0.1	0.2	0.3	0.1	0.5	1.4
August.....do....	0.3	0.8	0.1	0.2	0.3	0.2	0.5	1.5
November.....do....	0.3	0.9	0.1	0.2	0.3	0.2	0.5	1.3
Man-hours.....millions..	0.6	1.6	0.1	0.3	0.7	0.3	1.0	2.8
Wages.....million dollars..	2.4	6.3	0.5	1.4	2.4	1.2	4.0	11.2
Supplemental labor cost not included in payroll.....do....	0.4	1.0	0.1	0.2	0.3	0.2	0.6	1.5
Legally required expenditures, including Social Security contributions.....do....	0.1	0.3	(Z)	0.1	0.2	0.1	0.2	0.6
Payments for voluntary program.....do....	0.3	0.7	(Z)	0.1	0.1	0.1	0.4	1.0
Cost of supplies, etc., total.....do....	84.6	228.4	15.7	15.6	18.5	28.4	78.4	162.7
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	83.0	224.5	15.6	15.0	17.7	27.0	77.3	157.9
Cost of resales.....do....	-	-	-	-	(Z)	-	-	-
Purchased fuels consumed.....do....	(Z)	0.2	(Z)	(Z)	0.1	0.1	0.1	0.4
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	35.9	30.3	3.2	26.3	13.4	7.2	24.6	134.3
Cost.....million dollars..	0.3	0.4	0.1	0.3	0.2	0.1	0.3	1.3
Generated less sold.....million kw.-hrs..	40.2	141.3	17.1	17.4	9.4	34.9	46.5	255.5
Contract work.....million dollars..	1.2	3.3	0.1	0.2	0.4	1.3	0.7	3.1
Value of shipments and receipts (including resales), total.....do....	102.5	254.2	19.1	31.9	28.3	39.9	117.8	250.5
Value of resales.....do....	-	-	-	-	(Z)	-	-	-
Value added in mining.....do....	22.1	58.5	3.6	20.5	11.8	14.2	41.1	123.5
Capital expenditures (except land and mineral rights), total.....do....	4.2	32.7	0.2	4.2	2.0	2.7	1.7	35.7
Mineral development and exploration.....do....	-	-	-	-	-	-	-	-
New structures and additions.....do....	1.6	26.1	0.1	1.9	1.2	1.6	0.7	8.2
New machinery and equipment.....do....	2.3	6.5	0.1	2.2	0.6	1.1	0.9	27.3
Used plant and equipment.....do....	0.2	(Z)	-	(Z)	0.3	(Z)	(Z)	0.2
Gross book value of fixed assets, total.....do....	61.2	238.0	18.8	40.6	35.3	28.7	96.3	338.5
Mineral properties.....do....	-	-	-	-	-	-	-	-
Building and other structures (excluding land).....do....	25.1	62.2	3.9	20.8	13.6	6.6	37.2	82.8
Machinery and equipment.....do....	36.1	175.8	14.9	19.7	21.6	22.1	59.1	255.7

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	South Region--Con.		Total	West Region				Pacific Division
	West South Central Division--Con.			Mountain Division				
	Texas--Continued			Total	Wyoming	Colorado	New Mexico	
	West Texas B	Texas Panhandle						
Establishments, total.....number..	19	29	125	74	19	11	36	51
With 1 to 19 employees.....do....	13	19	86	48	16	8	16	38
With 20 to 99 employees.....do....	6	9	39	26	3	3	20	13
With 100 employees or more.....do....	-	1	-	-	-	-	-	-
All employees (average for the year).....1,000..	0.3	0.6	2.2	1.4	0.3	0.1	0.9	0.8
Payroll (all employees), total for year..million dollars..	2.6	4.8	17.4	10.7	2.0	0.9	7.3	6.7
Production, development, and exploration workers:								
Average for the year.....1,000..	0.3	0.4	2.0	1.2	0.2	0.1	0.8	0.7
March.....do....	0.3	0.5	2.0	1.2	0.2	0.1	0.8	0.7
May.....do....	0.3	0.5	1.9	1.2	0.2	0.1	0.8	0.7
August.....do....	0.3	0.4	2.0	1.3	0.3	0.1	0.9	0.7
November.....do....	0.3	0.4	1.9	1.2	0.2	0.1	0.8	0.7
Man-hours.....millions..	0.6	0.9	3.9	2.4	0.5	0.2	1.7	1.4
Wages.....million dollars..	2.2	3.6	15.8	9.8	1.9	0.8	6.6	6.0
Supplemental labor cost not included in payroll.....do....	0.3	0.5	2.2	1.3	0.2	0.1	0.9	0.9
Legally required expenditures, including Social Security contributions.....do....	0.1	0.2	0.8	0.5	0.1	(Z)	0.3	0.3
Payments for voluntary programs.....do....	0.2	0.3	1.4	0.8	0.1	0.1	0.6	0.6
Cost of supplies, etc., total.....do....	34.8	148.4	411.8	258.1	40.2	15.5	191.9	153.8
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	34.1	145.3	397.9	248.9	39.2	15.1	184.2	149.0
Cost of resales.....do....	-	-	-	-	-	-	-	-
Purchased fuels consumed.....do....	(Z)	0.9	2.8	2.1	0.4	0.1	1.6	0.7
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	11.7	99.6	166.8	68.2	13.1	9.4	42.4	98.6
Cost.....million dollars..	0.1	1.1	2.2	1.2	0.2	0.1	0.8	1.0
Generated less sold.....million kw.-hrs..	63.5	43.5	166.0	160.4	30.8	13.4	111.2	5.6
Contract work.....million dollars..	0.5	1.1	8.9	5.9	0.4	0.1	5.3	3.0
Value of shipments and receipts (including resales), total.....do....	50.4	203.9	481.1	293.8	48.5	18.4	214.5	187.4
Value of resales.....do....	-	-	-	-	-	-	-	-
Value added in mining.....million dollars..	18.3	62.1	95.3	56.7	9.0	3.2	41.3	38.6
Capital expenditures (except land and mineral rights), total.....do....	2.7	6.6	26.0	20.9	0.8	0.3	18.7	5.1
Mineral development and exploration.....do....	-	-	-	-	-	-	-	-
New structures and additions.....do....	0.9	1.1	6.7	4.2	0.1	(Z)	4.0	2.5
New machinery and equipment.....do....	1.8	5.4	18.7	16.3	0.6	0.2	14.4	2.4
Used plant and equipment.....do....	(Z)	0.1	0.6	0.4	(Z)	0.1	0.3	0.2
Gross book value of fixed assets, total.....do....	82.4	162.8	388.1	273.4	45.2	27.3	185.5	114.7
Mineral properties.....do....	-	-	-	-	-	-	-	-
Building and other structures (excluding land).....do....	11.9	23.5	77.6	51.7	4.9	9.0	34.5	25.9
Machinery and equipment.....do....	70.5	139.3	310.5	221.7	40.3	18.4	151.0	88.8

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (Z) Represents less than one-half of the unit of measure specified.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	All operations, total	Producing establishments									Non- producing estab- lishments
		Total	Natural Gasoline						Cycle conden- sate	Frac- tionat- ing	
			Total	Absorption	Compres- sion	Refriger- ation	Charcoal or other	Combina- tion			
Establishments, total.....number..	684	671	606	315	11	76	19	185	36	17	13
With 1 to 19 employees.....do....	468	455	412	194	8	67	19	124	26	8	13
With 20 to 99 employees.....do....	209	209	190	118	3	9	-	60	8	9	-
With 100 employees or more.....do....	7	7	4	3	-	-	-	1	2	-	-
All employees (average for the year).....1,000..	12.4	12.4	10.7	6.2	0.2	0.8	0.1	3.4	0.9	0.4	(Z)
Payroll (all employees), total for year..million dollars..	99.5	99.4	84.4	49.2	1.2	5.6	0.8	27.6	7.2	3.5	0.1
Production, development, and exploration workers:											
Average for the year.....1,000..	10.5	10.5	9.4	5.5	0.2	0.6	0.1	2.9	0.8	0.3	(Z)
March.....do....	10.4	10.4	9.3	5.6	0.2	0.6	0.1	2.8	0.8	0.3	(Z)
May.....do....	10.4	10.4	9.2	5.5	0.2	0.7	0.1	2.7	0.8	0.4	(Z)
August.....do....	10.6	10.6	9.5	5.6	0.2	0.7	0.1	2.9	0.8	0.3	(Z)
November.....do....	10.4	10.4	9.4	5.4	0.1	0.6	0.1	3.2	0.7	0.3	(Z)
Man-hours.....millions..	21.0	21.0	18.7	11.0	0.3	1.3	0.2	6.0	1.5	0.7	(Z)
Wages.....million dollars..	82.1	82.0	73.1	43.0	1.1	4.8	0.7	23.4	5.9	2.9	0.1
Supplemental labor cost not included in payroll....do....	12.2	12.2	10.7	5.8	0.2	0.7	0.1	3.9	1.1	0.4	(Z)
Legally required expenditures, including Social Security contributions.....do....	4.4	4.4	3.9	2.2	(Z)	0.3	(Z)	1.3	0.3	0.2	(Z)
Payments for voluntary programs.....do....	7.9	7.9	6.9	3.6	0.1	0.4	0.1	2.7	0.8	0.2	(Z)
Cost of supplies, etc., total.....do....	3,016.9	3,001.2	2,657.8	1,213.4	16.4	150.8	140.9	1,136.4	190.8	152.6	15.7
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	2,946.9	2,940.4	2,605.5	1,187.2	15.4	148.4	140.5	1,114.1	187.5	147.4	6.5
Cost of resales.....do....	(Z)	(Z)	(Z)	-	-	(Z)	-	-	-	-	-
Purchased fuels consumed.....do....	11.8	11.8	9.1	5.1	(Z)	1.0	0.1	2.8	0.6	2.1	(Z)
Electric energy:											
Purchased:											
Quantity.....million kw.-hrs..	1,032.7	1,032.2	892.1	446.0	3.8	44.7	6.6	391.0	71.1	69.0	0.5
Cost.....million dollars..	11.0	11.0	9.6	4.8	0.1	0.6	0.1	4.0	0.7	0.7	(Z)
Generated less sold.....million kw.-hrs..	1,424.1	1,424.1	1,252.6	729.5	-	32.2	5.2	485.7	149.1	22.4	-
Contract work.....million dollars..	47.2	38.0	33.6	16.3	0.9	0.8	0.2	15.4	2.0	2.4	9.2
Value of shipments and receipts (including resales), total.....do....	3,707.6	3,707.6	3,295.0	1,575.4	28.4	184.0	144.9	1,362.2	243.4	169.2	-
Value of resales.....do....	(Z)	(Z)	(Z)	-	-	(Z)	-	-	-	-	-
Value added in mining.....million dollars..	905.0	903.6	797.8	417.4	13.4	39.4	5.2	322.5	80.5	25.3	1.4
Capital expenditures (except land and mineral rights), total.....do....	214.4	197.2	160.7	55.4	1.4	6.2	1.2	96.6	27.9	8.6	17.1
Mineral development and exploration.....do....	-	-	-	-	-	-	-	-	-	-	-
New structures and additions.....do....	112.8	101.8	69.5	15.2	0.3	2.4	0.3	51.3	25.6	6.7	10.9
New machinery and equipment.....do....	98.8	92.7	88.6	39.0	1.1	3.3	0.9	44.3	2.3	1.8	6.1
Used plant and equipment.....do....	2.8	2.8	2.7	1.2	-	0.5	(Z)	1.0	(Z)	0.1	(Z)
Gross book value of fixed assets, total.....do....	2,603.2	2,576.7	2,255.5	1,289.6	12.4	109.5	21.8	822.2	224.4	96.8	26.5
Mineral properties.....do....	-	-	-	-	-	-	-	-	-	-	-
Building and other structures (excluding land)....do....	654.5	642.7	560.5	243.4	1.7	21.8	4.7	288.8	44.7	37.5	11.8
Machinery and equipment.....do....	1,948.8	1,934.1	1,695.1	1,046.1	10.6	87.7	17.0	533.6	179.7	59.3	14.7

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies. (Z) Represents less than one-half of the unit of measure specified.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
Natural gas liquids: Establishments, total.....	684	12.4	99.5	10.5	21.0	82.1	905.0	3,016.9	3,707.6	214.4
Establishments with an average of--										
0 to 4 employees.....	152	.3	2.5	.3	.6	2.2	38.2	153.7	166.8	25.4
5 to 9 employees.....	136	.9	7.4	.8	1.7	6.6	55.6	264.8	297.6	22.8
10 to 19 employees.....	180	2.5	20.0	2.2	4.5	17.3	188.3	585.9	716.3	57.7
20 to 49 employees.....	178	5.6	44.3	4.9	9.5	38.0	447.1	1 482.1	1 874.1	55.1
50 to 99 employees.....	31	2.0	16.5	1.6	3.3	12.3	110.9	530.5	496.3	53.3
100 to 249 employees.....	6	1.2	8.8	.8	1.5	5.8	64.9	(D)	156.7	(D)
250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
Estabs. covered by admin. records ¹	7	(Z)	(Z)	(Z)	(Z)	(Z)	.1	.3	.4	-

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (Z) Represents less than one-half of the unit of measure specified. (D) Withheld to avoid disclosing data for individual companies. These figures are included in the underscored figures above.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payroll indicated had fewer than 5 employees. Actual payroll (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1321	Natural gas liquids.....1967..	3,707.6	3,683.2	(D)	-	(D)	1,122.2	¹ 1,078.2	44.0
	1963..	2,800.8	2,791.2	4.3	5.3	-	798.9	1798.9	-

Standard notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies.

¹Represents net natural gas liquids only.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas		1967			1963		
			Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
				Quantity	Value (million dollars)		Quantity	Value (million dollars)
UNITED STATES								
1321- --	Natural gas liquids and residue gas, total.....	(X)	(X)	3,727.2	(X)	(X)	2,791.2	
13212 01	Natural gas liquids ¹	Million bbl....	582.1	581.2	1,295.6	458.8	458.2	913.5
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	14,395.8	2,431.6	(X)	11,468.4	1,877.7
WEST SOUTH CENTRAL DIVISION								
1321- --	Natural gas liquids and residue gas, total.....	(X)	(X)	2,744.3	(X)	(X)	1,936.8	
13212 01	Natural gas liquids ¹	Million bbl....	446.2	445.2	992.5	338.9	339.7	674.1
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	10,935.9	1,751.8	(X)	8,425.1	1,262.6
Louisiana:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	1,049.6	(X)	(X)	636.3	
13212 01	Natural gas liquids ¹	Million bbl....	98.7	97.8	247.9	62.4	62.1	140.5
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	4,126.6	801.7	(X)	2,604.0	495.8
North Louisiana:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	126.1	(X)	(X)	120.0	
13212 01	Natural gas liquids ¹	Million bbl....	17.5	17.4	45.5	14.5	14.5	37.7
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	423.2	80.6	(X)	465.1	82.3
South Louisiana:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	923.6	(X)	(X)	516.3	
13212 01	Natural gas liquids ¹	Million bbl....	81.2	80.4	202.5	47.8	47.5	102.8
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	3,703.4	721.1	(X)	2,138.9	413.5
Texas:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	1,474.1	(X)	(X)	1,107.9	
13212 01	Natural gas liquids ¹	Million bbl....	306.5	306.0	649.1	236.7	237.8	460.2
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	5,841.3	825.0	(X)	4,949.1	647.7
Texas Gulf Coast A:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	392.8	(X)	(X)	259.3	
13212 01	Natural gas liquids ¹	Million bbl....	86.2	87.3	185.7	51.7	51.9	115.8
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	1,445.2	207.1	(X)	1,042.7	143.5
Texas Gulf Coast B:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	102.6	(X)	(X)	88.7	
13212 01	Natural gas liquids ¹	Million bbl....	13.9	14.0	32.6	14.5	14.5	28.9
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	445.9	70.0	(X)	435.9	59.8
South Texas:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	253.2	(X)	(X)	194.2	
13212 01	Natural gas liquids ¹	Million bbl....	37.7	38.3	87.6	34.6	35.0	72.3
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	1,368.1	165.6	(X)	1,012.5	121.9
Southwest Texas:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	18.5	(X)	(X)	8.4	
13212 01	Natural gas liquids ¹	Million bbl....	2.0	2.0	4.4	1.1	1.1	2.4
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	93.3	14.1	(X)	40.9	6.0
North Central Texas A:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	31.9	(X)	(X)	18.5	
13212 01	Natural gas liquids ¹	Million bbl....	8.1	7.9	17.0	5.6	5.6	9.4
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	95.1	14.9	(X)	69.8	9.1
North Central Texas B:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	27.8	(X)	(X)	28.5	
13212 01	Natural gas liquids ¹	Million bbl....	6.5	6.4	13.9	6.3	6.3	10.6
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	87.5	13.9	(X)	133.1	17.9
East Texas A:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	32.3	(X)	(X)	22.8	
13212 01	Natural gas liquids ¹	Million bbl....	6.9	6.7	16.9	3.5	3.5	8.3
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	99.5	15.4	(X)	115.2	14.5
East Texas B:								
1321- --	Natural gas liquids and residue gas, total..	(X)	(X)	114.4	(X)	(X)	105.4	
13212 01	Natural gas liquids ¹	Million bbl....	27.7	27.7	65.6	23.6	23.6	57.3
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	338.2	48.8	(X)	377.7	48.1

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas		1967			1963		
			Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
				Quantity	Value (million dollars)		Quantity	Value (million dollars)
1321- --	West Texas A:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	246.9	(X)	(X)	178.9
13213 01	Natural gas liquids ¹	Million bbl.....	66.4	65.2	128.2	54.7	54.3	86.3
	Residue gas shipped ²	Billion cu. ft..	(X)	839.5	118.7	(X)	746.8	92.6
1321- --	West Texas B:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	50.4	(X)	(X)	33.2
13213 01	Natural gas liquids ¹	Million bbl.....	15.7	15.3	29.0	10.5	10.5	15.7
	Residue gas shipped ²	Billion cu. ft..	(X)	140.6	21.4	(X)	123.8	17.5
1321- --	Texas Panhandle:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	203.5	(X)	(X)	168.4
13213 01	Natural gas liquids ¹	Million bbl.....	35.4	35.3	68.2	29.7	30.6	51.8
	Residue gas shipped ²	Billion cu. ft..	(X)	888.5	135.3	(X)	851.1	116.6
1321- --	WEST REGION							
13212 01	Natural gas liquids and residue gas, total.....	.....	(X)	(X)	479.0	(X)	(X)	395.7
13213 01	Natural gas liquids ^{1 3}	Million bbl.....	76.9	76.7	172.4	61.4	61.5	131.2
	Residue gas shipped ²	Billion cu. ft..	(X)	1,660.9	306.6	(X)	1,383.2	264.5
	<u>Mountain Division</u>							
1321- --	Natural gas liquids and residue gas, total.....	.....	(X)	(X)	292.2	(X)	(X)	179.7
13212 01	Natural gas liquids ^{1 3}	Million bbl.....	54.5	54.2	109.9	35.1	35.2	61.1
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	1,250.7	182.3	(X)	921.6	118.7
1321- --	Wyoming:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	47.4	(X)	(X)	(D)
13213 01	Natural gas liquids ¹	Million bbl.....	7.3	7.7	14.2	5.6	5.6	(D)
	Residue gas shipped ²	Billion cu. ft..	(X)	209.9	33.2	(X)	140.4	20.0
1321- --	Colorado:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	18.4	(X)	(X)	(D)
13213 01	Natural gas liquids ^{1 3}	Million bbl.....	3.1	3.0	7.0	3.5	3.5	(D)
	Residue gas shipped ²	Billion cu. ft..	(X)	83.0	11.4	(X)	72.7	10.0
1321- --	New Mexico:							
13212 01	Natural gas liquids and residue gas, total..	.....	(X)	(X)	213.9	(X)	(X)	(D)
13213 01	Natural gas liquids ^{1 3}	Million bbl.....	41.4	40.9	83.0	23.1	23.2	(D)
	Residue gas shipped ²	Billion cu. ft..	(X)	907.0	130.9	(X)	660.1	82.4
	<u>Pacific Division</u>							
1321- --	Natural gas liquids and residue gas, total.....	.....	(X)	(X)	186.9	(X)	(X)	216.0
13212 01	Natural gas liquids ^{1 3}	Million bbl.....	22.4	22.4	62.6	26.2	26.3	70.1
13213 01	Residue gas shipped ²	Billion cu. ft..	(X)	410.3	124.3	(X)	461.6	145.8

Note: The sum of the detail may not add to the totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents gross production of natural gasoline, plant condensate, and liquefied petroleum gases, including drip from lines, isopentane, and ethane. Also includes finished gasoline, kerosene, distillate, and residual oils produced at natural gas liquids plants.²Represents all residue gas used by the reporting company at other company operations, gas returned to supplying producer, and gas delivered to other companies. All gas volumes are adjusted to a pressure base of 14.73 pounds absolute at 60° F.³For 1963 represents gross natural gas liquids less natural gas liquids received from other natural gas liquids plants for further processing and less crude petroleum received for processing.

TABLE 7. Selected Supplies, Natural Gas Received for Processing, Natural Gas Liquids Received for Further Processing, Purchased Machinery Installed, and Fuels Used by Geographic Area: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
UNITED STATES						
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuel used, total.....		(X)	2,958.7	(X)	2,090.9
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	2,946.9	(X)	2,083.4
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft...	5,248.8	790.9	12,588.6	1,841.3
131303	Gas from gas and gas condensate wells ¹	do.....	10,753.4	1,778.4		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl.....	73.5	143.2	51.3	92.9
132103	Crude petroleum, including condensate, received for processing.....	do.....	10.6	30.2	8.6	21.8
353011	Purchased machinery installed.....		(X)	104.0	(X)	39.1
	Supplies used:					
331201	Steel mill shapes and forms.....	1,000 short tons.	(NA)	48.7	21.8	4.8
970099	All other supplies.....		(X)	45.8		
974000	Undistributed supplies, natural gas received for processing, purchased machinery installed ²		(X)	5.7	(X)	83.6
	Fuels used, total.....		(X)	11.8	(X)	7.5
131311	Gas-natural, manufactured, and mixed.....	Billion cu. ft...	57.5	9.3	33.0	6.5
291111	Gasoline.....	Thousand gallons.	1,606.0	0.5	1,685.0	0.7
132130	Residue gas produced and used at this establishment for heat or power.....	Billion cu. ft...	504.0	(X)	477.1	(X)
977000	Undistributed fuels used ²		(X)	1.8	(X)	-
SOUTH REGION						
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuel used, total.....		(X)	2,328.5	(X)	1,570.2
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	2,320.3	(X)	1,564.7
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft...	4,332.6	615.0	10,013.1	1,453.5
131303	Gas from gas and gas condensate wells ¹	do.....	8,521.8	1,398.9		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl.....	54.0	106.3	(NA)	1,453.5
132103	Crude petroleum, including condensate, received for processing.....	do.....	9.5	27.4	(NA)	
353011	Purchased machinery installed.....		(X)	84.6	(X)	34.6
970099	All other supplies.....		(X)	81.7	(X)	76.6
974000	Undistributed supplies, natural gas received for processing, purchased machinery installed ²		(X)	6.4		
	Fuels used, total.....		(X)	8.2	(X)	5.5
131311	Gas-natural, manufactured, and mixed.....	Billion cu. ft...	36.8	6.1	(D)	(NA)
132130	Residue gas produced and used at this establishment for heat or power.....	do.....	403.0	(X)	(NA)	(X)
977000	Undistributed fuels used ²		(X)	1.6	(NA)	(NA)
WEST SOUTH CENTRAL DIVISION						
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuels used, total.....		(X)	2,169.3	(X)	1,399.9
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	2,162.6	(X)	1,395.5
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft...	4,309.6	611.4	9,305.6	1,198.8
131303	Gas from gas and gas condensate wells ¹	do.....	7,850.1	1,249.5		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl.....	(D)	(³)	37.1	68.5
132103	Crude petroleum, including condensate, received for processing.....	do.....	9.5	27.4	8.0	20.6

See footnotes at end of table.

TABLE 7. Selected Supplies, Natural Gas Received for Processing, Natural Gas Liquids Received for Further Processing, Purchased Machinery Installed, and Fuels Used by Geographic Area: 1967 and 1963—Con.

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>WEST SOUTH CENTRAL DIVISION--Continued</u>					
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuels used--Continued					
353011	Purchased machinery installed.....		(X)	84.3	(X)	34.2
970099	All other supplies.....		(X)	³ 184.1		
974000	Undistributed supplies, natural gas processed, and purchased machinery installed ²		(X)	5.9	(X)	73.4
	Fuels used, total.....		(X)	6.7	(X)	4.4
131311	Gas-natural, manufactured, and mixed.....	Billion cu. ft...	28.8	4.8	22.5	(X)
132130	Residue gas produced and used at this establishment for heat or power.....	do.....	401.8	(X)	361.7	(X)
977000	Undistributed fuels used ²		(X)	1.5	(X)	-
	Louisiana					
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuel used, total.....		(X)	933.7	(X)	484.7
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	931.5	(X)	483.3
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft...	1,353.3	256.3	2,712.1	435.1
131303	Gas from gas and gas condensate wells ¹	do.....	3,004.6	587.0		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl.....	(D)	(³)	9.8	21.0
131203	Crude petroleum, including condensate, received for processing.....	do.....	1.9	5.4		
	Purchased machinery installed.....		(X)	26.1	(X)	4.8
970099	All other supplies.....		(X)	³ 55.4		
974000	Undistributed supplies, natural gas received for processing and purchased machinery installed ²		(X)	1.3	(X)	22.5
	Fuels used, total.....		(X)	2.2	(X)	1.4
131311	Gas-natural, manufactured, and mixed.....	Billion cu. ft...	(D)	(D)	7.2	(X)
132130	Residue gas produced and used at this establishment for heat or power.....	do.....	59.9	(X)	43.6	(X)
977000	Undistributed fuels used ²		(X)	0.9	(X)	-
	Texas					
	Selected supplies, natural gas received for processing, purchased machinery installed and fuel used, total.....		(X)	1,094.9	(X)	789.9
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	1,091.5	(X)	787.8
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft...	2,659.0	313.3	5,589.9	657.2
131303	Gas from gas and gas condensate wells ¹	do.....	4,125.4	588.2		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl.....	(D)	(³)	26.3	50.5
131203	Crude petroleum, including condensate, received for processing.....	do.....	7.4	21.4	3.9	9.0
	Purchased machinery installed.....		(X)	50.2	(X)	25.7
970099	All other supplies.....		(X)	117.1		
974000	Undistributed supplies, natural gas received for processing, and purchased machinery installed ²		(X)	1.3	(X)	45.4
	Fuels used, total.....		(X)	3.4	(X)	2.1
131311	Gas-natural manufactured and mixed.....	Billion cu. ft...	19.2	2.9	11.8	(NA)
132130	Residue gas produced and used at this establishment for heat or power.....	do.....	277.2	(X)	268.0	(X)
977000	Undistributed fuels used ²		(X)	0.3	(X)	-

See footnotes at end of table.

TABLE 7. Selected Supplies, Natural Gas Received for Processing, Natural Gas Liquids Received for Further Processing, Purchased Machinery Installed, and Fuels Used by Geographic Area: 1967 and 1963—Con.

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	WEST REGION					
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuels used, total.....		(X)	400.7	(X)	313.0
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	397.9	(X)	312.4
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft..	843.1	166.3	1,586.0	{
131303	Gas from gas and gas condensate wells ¹.....	..do.....	1,096.6	174.3		
	Liquids processed:					
132120	Natural gas liquids received for further processing.....	Million bbl....	(D)	(3)	(NA)	{
131203	Crude petroleum, including condensate, received for processing.....	..do.....	(D)		(NA)	
353011	Purchased machinery installed.....		(X)	17.7	(X)	3.8
970099	All other supplies.....		(X)	³ 39.6	(X)	}
974000	Undistributed supplies, natural gas processed, and purchased machinery installed ²		(X)	(Z)		
	Fuels used, total.....		(X)	2.8	(X)	0.6
132130	Residue gas produced and used at this establishment for heat or power.....	Billion cu. ft..	80.2	(X)	88.1	(X)
977000	Undistributed fuels used ²		(X)	0.2	(X)	-
	MOUNTAIN DIVISION					
	Selected supplies, natural gas received for processing, purchased machinery installed and fuels used, total.....		(X)	251.0	(X)	158.3
	Selected supplies, natural gas received for processing, and purchased machinery, installed, total.....		(X)	248.9	(X)	157.8
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft..	435.7	43.1	1,039.9	{
131303	Gas from gas and gas condensate wells ¹.....	..do.....	1,041.8	158.0		
353011	Purchased machinery installed.....		(X)	15.7	(X)	2.7
970099	All other supplies.....			⁴ 32.1	(X)	}
974000	Undistributed supplies, natural gas processed and purchased machinery installed ²		(X)	(Z)		
	Fuels used, total.....		(X)	2.1	(X)	0.5
132130	Residue gas produced and used at this establishment for heat or power.....	Billion cu. ft..	55.9	(X)	52.6	(X)
977000	Undistributed fuels used ²		(X)	0.2	(X)	-
	NEW MEXICO					
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuels used, total.....		(X)	185.8	(X)	110.9
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....		(X)	184.2	(X)	110.4
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft..	260.8	25.9	737.5	{
131303	Gas from gas and gas condensate wells ¹.....	..do.....	746.6	115.4		
353011	Purchased machinery installed.....		(X)	13.5	(X)	1.5
970099	All other supplies.....		(X)	⁴ 29.4	(X)	}
974000	Undistributed supplies, natural gas received for processing, and purchased machinery installed ²		(X)	(Z)		
	Fuels used, total.....		(X)	1.6	(X)	0.5

See footnotes at end of table.

TABLE 7. Selected Supplies, Natural Gas Received for Processing, Natural Gas Liquids Received for Further Processing, Purchased Machinery Installed, and Fuels Used by Geographic Area: 1967 and 1963 -Con.

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>PACIFIC DIVISION</u>					
	Selected supplies, natural gas received for processing, purchased machinery installed, and fuel used, total.....	.....	(X)	149.7	(X)	154.7
	Selected supplies, natural gas received for processing, and purchased machinery installed, total.....	.....	(X)	149.0	(X)	154.6
	Natural gas processed:					
131301	Gas from oil wells (casinghead) ¹	Billion cu. ft..	407.4	123.2	546.0	⁴ 149.2
131303	Gas from gas and gas condensate wells ¹.....	.....do.....	54.8	16.3		
353011	Purchased machinery installed.....	.....	(X)	2.0	(X)	1.1
970099	All other supplies.....	.....	(X)	⁴ 7.5	(X)	4.4
974000	Undistributed supplies, natural gas processed, and purchased machinery installed ².....	.....	(X)	-		
	Fuels used, total.....	.....	(X)	0.7	(X)	0.1
132130	Residue gas produced and used at this establishment for heat or power.....	Billion cu. ft..	24.3	(X)	35.5	(X)
977000	Undistributed fuels used ².....	.....	(X)	-	(X)	-

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing data for individual companies. (Z) Less than one-half of the unit of measure specified.

¹Gas volumes adjusted to a pressure base of 14.73 pounds absolute at 60°F.

²This item represents the total cost of supplies or fuels for establishments that did not report detailed supplies data. For 1967 this also includes estimates for establishments that were not mailed report forms.

³Included with all other supplies.

⁴Includes the cost of natural gas liquids and crude petroleum, including lease condensate, received for processing.

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

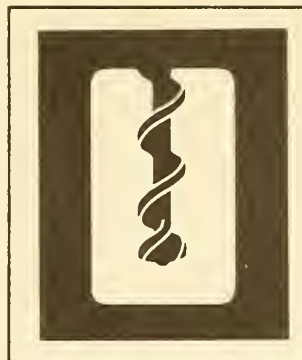
research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



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INDUSTRY SERIES

OIL AND GAS FIELD SERVICES

SIC code	Industry
1381	Drilling oil and gas wells
1382	Oil and gas exploration services
1389	Oil and gas field services, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director

Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	4
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	5
2B General Statistics for the Industry, by County: 1967 and 1963	16
3A Detailed Statistics, by Selected Geographic Areas: 1967	29
3B Detailed Statistics by Principal Types of Services: 1967	40
4 General Statistics, by Employment Size of Establishment: 1967	43
5 Industry-Product Analysis—Summary of Industry Receipts and Shipments and Receipts for Primary Services: 1967 and 1963	44
6A Primary Services of the Industry, by Geographic Areas: 1967 and 1963	45
6B Drilling Statistics as Reported by Drilling Contractors by Geographic Areas: 1967 .	53
7A Selected Supplies, Minerals Received for Preparation, and Purchased Machinery Installed, by Geographic Area: 1967 and 1963	54
7B Fuels Used, by Geographic Area: 1967 and 1963	57
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

OIL AND GAS FIELD SERVICES

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 138, Oil and Gas Field Services. The separate industries included in this group are as follows:

SIC Code and Title

- 1381--Drilling Oil and Gas Wells
- 1382--Oil and Gas Exploration Services
- 1389--Oil and Gas Field Services, Not Elsewhere Classified

This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1381, Drilling Oil and Gas Wells. This industry represents establishments primarily engaged in drilling wells for oil or gas for others on a contract, fee, or other basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.

Industry 1382, Oil and Gas Exploration Services. This industry represents establishments primarily engaged in geophysical, geological, and other exploration work on a contract, fee, or other basis.

Industry 1389, Oil and Gas Field Services, N.E.C. This industry represents establishments primarily engaged in performing, for others on a contract, fee, or other basis, oil and gas field services, not elsewhere classified, such as excavating slush pits and cellars; grading, and building of foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

Establishments primarily engaged in hauling oil and gas field supplies and equipment, and in oil and gas field machine-shop work, are not included in the mining division, according to the Standard Industrial Classification, and were not covered in the 1967, 1963, 1958, and 1954 censuses. In the 1939 census, when such establishments were included, receipts for hauling and machine-shop services accounted for about 8 percent of the total receipts for oil and gas field services, as then defined.

SUBINDUSTRY AND TYPE OF OPERATION STATISTICS. Separate subindustry statistics are shown in this report for establishments primarily performing 2 types of services in each of industries 1381 and 1382, and 11 types of services in industry 1389. (See tables 2 and 3B.)

Establishments classified in the Oil and Gas Field Services Industries were required to submit a separate report for each State or for Louisiana, Texas, New Mexico, and California, all such activities in one district. Each report contained detailed data on the kinds of work performed and the locations of the work. All reports were classified on the basis of the principal kind of work performed and the State or district for Louisiana,

Texas, and New Mexico in which the service was performed. Table 3B shows, in detail, the receipts for each type of service performed by subindustry classifications of service establishment reports. Table 3A shows the total receipts for oil and gas field services performed in selected geographical areas as percents of the total receipts by establishments classified in that area. The figures indicate a fairly high degree of concentration of activities, although some contractors performed services in almost every oil-producing State.

Some companies primarily performing oil and gas field services also operated oil or gas properties. Such companies were required to file separate reports for each State (or district for Louisiana, Texas, and New Mexico) in which oil and gas field properties were operated and each report was classified on the basis of whether receipts from production or service activities in the State or district were greater. Separate statistics are shown in tables 2A and 3B for service establishments with and without well operations. About 4.4 percent of all service establishments included well operations, but reports including well operations accounted for over 9 percent of all establishments primarily engaged in drilling oil, gas, dry, or service wells. Service establishments operated about 6,000 oil and gas wells and drilled about 900 wells as operator. They produced about 13.8 million barrels of oil and 59.0 billion cubic feet of gas, but these each amounted to less than one percent of the total U.S. production of oil and gas.

PRIMARY AND SECONDARY SERVICES. The total receipts of the Oil and Gas Field Services Industries in 1967 were \$2,017 million. Of this total, the Drilling Oil and Gas Wells Industry accounted for \$894 million, of which \$835 million were for receipts for services primary to the industry, \$12 million for services classified in other industries in Industry Group 138. The Oil and Gas Exploration Services Industry accounted for \$152 million, of which \$145 million were for receipts for services primary to the industry, and \$4 million for products purchased for resale. The Oil and Gas Field Services, N.E.C., Industry accounted for \$971 million, of which \$926 million were for services primary to the industry, \$13 million for services classified in other industries in Industry Group 138, and \$26 million for shipments of products purchased for resale.

The general statistics (employment, payrolls, receipts for services and shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the performance of secondary services or production of minerals. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with receipts for oil and gas field services by all industries and drilling statistics for all contract drilled wells (tables 6A and 6C). The extent of the "activity mix" is indicated in table 5A which shows the primary and secondary activities of an industry and also the receipts for primary services performed in the industry and, separately, those performed as secondary activities in other industries.

STATE, DISTRICT, AND COUNTY STATISTICS. Each report for all oil and gas field operations in the United States contained an inquiry requesting, by State and county, for 1967 the receipts for services performed for others, the quantity of crude petroleum and natural gas shipped, employment on March 15, and capital expenditures. State or district reports requested such information by county within the State or district. This county distribution was not completely reported; but the distributed figures accounted for over percent of the total receipts for services.

General statistics, by county, were completed for each establishment by allocating the reported totals on the basis of the reported county figures. All employment, payroll, and man-hour figures were allocated on the basis of the reported March 15 employment. Other allocated figures were based on partly estimated "receipts for services and shipments," by county, and on capital expenditures. "Receipts for services and shipments"

were estimated, by county, by adding to the reported receipts for services the estimated value of crude petroleum and natural gas shipped--approximated by multiplying the average unit values of crude petroleum and natural gas, indicated by reported figures for each establishment, by the reported county quantity figures. These county figures, together with counts of "county establishments," are shown in table 2B.

PAYMENTS AND RECEIPTS FOR OIL AND GAS FIELD SERVICES. The following table shows, for divisions and selected States, the total receipts for oil and gas field services performed by all establishments classified in the mineral industries and the total payments for such services by the Crude Petroleum and Natural Gas and Oil and Gas Field Services Industries. In this table, the receipts for oil and gas field services shown are based on the data reported by State and county and, thus, should be comparable, by area, with the figures reported by operators of oil and gas field properties. Since the allocation by State was not completely reported, some of the area differences are due to some over-allocation of data from some of the smaller reports to the principal State in which services were performed. Differences between payments and receipts also result from the exclusion from "receipts for oil and gas field services" of hauling and machine shop work; and from the probable exclusion from "payments for contract work" and inclusion as "cost of purchased machinery" of some services performed by contractors who furnished and installed machinery.

PAYMENTS AND RECEIPTS FOR OIL AND GAS FIELD SERVICES: 1967

Geographic division and State	Payments for services reported by industry using the service (million dollars)			Receipts for services reported by the service establishment (million dollars)		
	Total	Contract services for the crude petroleum and natural gas industry	Subcontract services for the oil and gas field services industries	Total	By the oil and gas field services industries	By the crude petroleum and natural gas industry
United States, total..	1,598.3	1,519.8	78.5	1,947.9	1,906.3	41.6

The following tables are being issued in a special supplemental report titled, Oil and Gas Field Services, MIC67-13C(Supp.):

- Table 8A. Detailed Statistics for Operating Companies Ranked by Value of Company Shipments and Receipts: 1967
- Table 8B. Detailed Statistics for all Companies by Geographic Area: 1967

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies	Establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses			Receipts for services and shipments	Net receipts for services and shipments ³	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages		Supplies and purchased fuels and electric energy ²	Subcontract work	Purchased machinery installed			
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
INDUSTRY 138.--OIL AND GAS FIELD SERVICES															
1967 ⁴	(NA)	6,878	1,431	106.1	706.5	90.6	195.5	569.0	1,524.2	489.8	78.5	172.7	2,016.7	1,985.3	248.6
1963	5,915	6,212	1,248	112.4	631.7	96.6	206.6	517.4	1,241.4	515.7	101.0	187.8	1,817.9	1,736.3	227.9
1958	5,686	5,915	1,308	116.3	561.3	98.1	212.3	437.6	1,107.8	476.5	64.9	128.4	1,625.9	1,564.5	151.5
1954 ⁵	5,463	5,515	1,437	125.9	541.6	112.1	247.3	452.7	1,118.5	491.6	62.3	176.4	1,631.0	1,577.0	217.9
1939	1,619	(NA)	(NA)	39.8	65.2	35.2	57.7	51.5	(NA)	(NA)	(NA)	(NA)	(NA)	187.5	(NA)
1902 ⁶	(NA)	(NA)	(NA)	11.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	17.4	(NA)
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS															
1967 ⁴	(NA)	2,347	581	42.9	294.7	38.7	81.4	255.2	627.4	268.0	51.6	87.1	893.7	892.7	140.4
1963	2,671	2,836	746	55.4	318.2	50.3	106.3	281.1	653.3	276.3	82.1	115.7	979.3	974.5	148.0
1958 ⁵	2,911	3,064	820	59.4	289.2	52.3	109.5	239.3	587.4	283.7	51.4	84.5	904.9	902.7	102.0
1954 ⁵	2,846	2,869	878	68.0	304.3	62.1	133.2	264.8	624.0	335.8	46.0	120.4	972.7	968.1	153.5
1939	985	(NA)	(NA)	24.2	41.9	22.5	38.6	36.0	(NA)	(NA)	(NA)	(NA)	(NA)	128.1	(NA)
INDUSTRY 1382.--OIL AND GAS EXPLORATION SERVICES															
1967 ⁴	(NA)	636	99	8.4	53.1	6.6	15.9	39.4	126.4	24.3	4.8	16.4	152.0	147.6	20.0
1963	359	373	68	8.7	47.8	7.2	16.2	36.9	90.0	26.3	5.2	10.1	119.8	111.7	11.7
1958 ⁵	329	347	76	9.6	43.6	7.6	16.7	31.1	64.4	20.2	3.6	6.1	87.2	86.1	7.1
1954	309	330	(NA)	11.5	49.5	10.0	24.0	40.8	81.3	27.2	6.5	6.5	114.8	(D)	6.7
1939	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	12.6	(NA)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.															
1967 ⁴	(NA)	3,895	751	54.8	358.7	45.3	98.2	274.4	770.4	197.5	22.1	69.2	971.0	945.0	88.2
1963	2,901	3,003	434	48.3	265.7	39.0	84.1	199.4	498.0	213.2	13.7	62.0	718.8	650.1	68.2
1958 ⁵	2,456	2,504	411	47.3	228.0	38.2	86.1	166.9	456.0	172.3	9.8	37.8	633.7	575.7	42.2
1954	2,313	2,316	(NA)	46.4	187.9	40.0	90.1	147.0	413.3	128.7	9.7	49.5	543.5	(D)	57.7
1939 ⁷	558	(NA)	(NA)	11.3	15.0	10.0	14.0	11.8	(NA)	(NA)	(NA)	(NA)	(NA)	46.8	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: (D) Withheld to avoid disclosing figures of individual companies. (NA) Not available.

¹Establishment counts for 1967 are not entirely comparable to prior years since companies were required to file separate reports for each State (or for each district in California, Louisiana, New Mexico, and Texas) in which they had operations or in which they performed services during 1967. Prior to 1967 a company was required to file only a single report for all oil and gas field services performed in the United States.²Includes the cost of gas purchased for gas lift and repressuring and the cost of products purchased for resale.³Represents gross receipts for services and shipments less value of shipments of products purchased for resale without further processing.⁴In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, in industry 1381 there were 258 establishments without paid employees; however, they accounted for less than 3 percent of this industry's value added, in industry 1382 there were 52 establishments without paid employees; however, they accounted for less than 6 percent of the industry's value added. In industry 1389 there were 273 establishment without paid employees; however, they accounted for less than 4 percent of the industry's value added.⁵Excludes figures for Alaska. For 1958, 2 establishments in the Drilling Oil and Gas Wells Industry, 1 establishment in the Oil and Gas Exploration Services Industry, and 1 establishment in the Oil and Gas Field Services, N.E.C. Industry were reported; For 1954, 1 establishment in the Drilling Oil and Gas Wells Industry was reported.⁶Represents number of employees engaged in contract work and payments for contract work as reported by companies operating oil and gas field properties.⁷Except for net receipts for services and shipments, excludes data for establishments primarily engaged in well surveying and well logging services. The total receipts for services by such establishments in 1939 was \$5.0 million.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	INDUSTRY 1381.--DRILLING OIL AND GAS WELLS												
Total.....	2,347	581	42.9	294.7	38.7	81.4	255.2	627.4	406.7	893.7	140.4	55.4	653.3
Offshore.....	66	49	5.7	48.5	5.2	12.1	44.1	151.5	101.4	194.6	58.3	(NA)	(NA)
Geographic Areas													
Middle Atlantic Division, total.....	115	7	0.6	3.7	0.5	1.2	3.3	9.2	6.9	14.6	1.5	0.7	6.8
New York.....	17	-	0.1	0.4	0.1	0.1	0.4	0.8	0.3	1.0	0.1	0.1	0.9
East North Central Division, total.....	301	34	2.8	15.4	2.7	5.0	13.8	31.6	15.8	43.0	4.4	3.0	31.5
Ohio.....	135	8	1.1	6.2	1.2	2.1	5.8	12.7	7.6	18.5	1.8	0.8	9.7
Indiana.....	35	4	0.3	1.2	0.2	0.4	1.0	2.6	1.2	3.4	0.4	0.4	2.6
Illinois.....	99	16	1.0	5.1	0.9	1.8	4.6	10.5	4.6	13.4	1.8	1.3	11.1
West North Central Division, total.....	165	21	1.8	10.8	1.6	3.3	9.7	22.3	13.8	33.0	3.0	2.8	33.4
South Atlantic Division, total.....	110	12	0.8	4.3	0.7	1.4	3.7	8.3	4.3	11.0	1.6	1.1	10.8
East South Central Division, total.....	168	24	1.5	9.5	1.4	2.8	8.4	20.8	14.0	31.1	3.7	2.7	28.5
Alabama.....	9	1	0.1	0.5	0.1	0.2	0.5	1.3	1.2	2.0	0.4	0.2	3.5
Mississippi.....	33	19	1.0	6.3	0.8	1.8	5.5	13.8	10.0	21.5	2.3	1.6	19.3
West South Central Division, total.....	1,147	373	27.7	186.6	25.0	53.1	161.6	409.1	263.3	576.8	95.6	37.0	438.9
Offshore.....	43	35	4.5	34.4	4.1	9.3	31.1	113.2	75.8	144.6	44.4	(NA)	(NA)
Louisiana.....	209	102	10.1	75.1	9.2	20.6	66.2	184.3	115.9	247.8	52.4	11.8	173.5
North Louisiana.....	64	15	0.9	5.8	0.8	1.7	4.8	10.8	7.6	16.5	2.0	2.0	21.7
South Louisiana.....	111	60	5.2	38.5	4.7	10.5	33.3	72.7	43.1	102.3	12.5	¹ 10.0	¹ 151.7
Offshore Louisiana.....	34	27	4.0	30.8	3.7	8.3	28.0	100.7	66.2	129.0	37.9	(¹)	(¹)
Texas, total.....	699	195	13.1	85.1	11.9	24.5	74.4	173.9	115.9	255.0	34.8	19.0	206.8
Texas Gulf Coast A.....	86	32	2.0	12.4	1.8	3.5	10.5	22.8	12.9	32.8	3.0	¹ 2.9	¹ 29.5
Texas Gulf Coast B.....	43	13	0.7	4.6	0.6	1.3	3.8	10.2	4.0	12.7	1.5	¹ 1.0	¹ 11.4
South Texas.....	69	23	1.7	10.2	1.6	2.9	8.8	19.8	10.0	26.9	2.9	¹ 2.4	¹ 27.1
South West Texas.....	44	5	0.8	4.6	0.8	1.6	4.5	7.2	5.3	11.7	0.8	0.7	6.0
North Central Texas A.....	112	16	1.2	6.4	1.1	2.2	5.6	12.9	9.2	18.8	3.2	1.6	17.5
North Central Texas B.....	58	12	0.6	3.0	0.5	0.9	2.5	6.5	3.7	8.8	1.3	0.9	8.0
East Texas A.....	33	8	0.6	3.4	0.5	1.0	2.6	8.9	4.5	12.0	1.3	1.0	11.7
East Texas B.....	49	12	0.8	5.5	0.8	1.6	4.9	11.2	6.7	15.3	2.5	1.0	8.8
West Texas A.....	125	47	3.2	23.0	2.9	6.1	20.3	44.3	34.8	70.8	8.4	5.6	60.7
West Texas B.....	35	11	0.6	4.4	0.6	1.3	4.0	10.8	9.6	17.6	2.7	0.9	13.7
Texas Panhandle.....	36	8	0.5	3.9	0.5	1.1	3.7	6.8	5.8	11.9	0.6	1.1	12.4
Offshore Texas.....	9	8	0.5	3.6	0.4	1.0	3.1	12.5	9.6	15.6	6.5	(¹)	(¹)
Mountain Division, total.....	221	63	3.9	27.9	3.6	7.6	25.0	53.1	45.1	88.7	9.4	5.2	64.6
Montana.....	36	9	0.6	4.2	0.6	1.2	3.9	7.5	9.9	15.3	2.2	0.7	9.6
Wyoming.....	52	14	1.1	7.8	1.0	2.2	6.9	13.7	13.2	24.3	2.6	1.3	16.0
Colorado.....	40	7	0.5	3.9	0.4	0.8	3.2	6.7	5.1	10.5	1.3	0.5	7.0
New Mexico, total.....	70	27	1.4	9.5	1.3	2.8	8.6	18.9	13.8	30.1	2.6	2.2	26.3
West New Mexico.....	23	8	0.5	3.3	0.4	0.9	2.8	4.7	5.2	9.0	0.8	(NA)	(NA)
East New Mexico.....	47	19	0.9	6.3	0.8	1.9	5.8	14.3	8.6	21.2	1.7	(NA)	(NA)
Utah.....	15	5	0.2	2.1	0.3	0.5	2.0	4.4	2.6	6.3	0.7	(NA)	(NA)
Pacific Division, total.....	120	47	3.9	36.6	3.3	7.2	29.8	72.9	43.6	95.5	21.1	3.0	38.8
Offshore.....	23	14	1.2	14.1	1.1	2.8	13.0	38.3	25.6	50.0	13.9	(NA)	(NA)
California, total.....	100	36	3.0	25.7	2.5	5.2	19.8	47.6	25.7	61.8	11.4	2.9	35.0
North California.....	10	3	0.2	1.4	0.2	0.3	1.3	3.0	1.5	4.0	0.5	(NA)	(NA)
East Central California.....	30	10	0.7	6.0	0.7	1.4	5.0	11.2	4.5	14.4	1.3	(NA)	(NA)
Central Coastal California.....	13	3	0.2	1.5	0.2	0.3	1.3	2.7	1.3	3.5	0.5	(NA)	(NA)
South California.....	34	13	1.4	11.7	1.0	2.0	7.5	15.3	8.6	19.4	4.4	(NA)	(NA)
Offshore California.....	13	7	0.5	5.1	0.5	1.1	4.7	15.5	9.8	20.6	4.7	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS--Continued													
Principal Type of Service and Geographic Area													
United States, total.....	2,347	582	42.9	294.7	38.7	81.4	255.2	627.4	406.7	893.7	140.4	55.4	653.3
Central administrative offices and related facilities.....	34	8	0.6	6.4	-	-	-	-	-	-	-	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	2,097	481	37.0	252.0	33.9	70.6	223.6	553.9	385.5	807.8	131.5	45.0	551.6
With well operations	197	97	6.8	44.6	6.1	13.4	39.2	113.4	89.8	167.8	35.4	8.5	115.4
Without well operations.....	1,900	384	30.2	207.4	27.8	57.2	184.4	440.5	295.6	640.0	96.1	36.4	436.2
Drilling in, spudding in, and tailing in, total.....	44	11	1.1	7.7	1.1	1.9	6.5	19.1	6.7	24.1	1.7	2.1	23.7
With well operations.....	7	1	0.1	0.5	0.1	0.2	0.5	1.2	1.3	2.2	0.3	0.3	4.9
Without well operations.....	37	10	1.0	7.2	1.0	1.7	6.0	17.9	5.4	21.9	1.4	1.8	18.8
Reworking wells, total.....	172	82	4.2	28.8	3.9	9.1	25.0	54.4	14.5	61.8	7.1	8.4	78.1
With well operations.....	7	2	0.1	0.9	0.1	0.3	0.8	1.4	0.6	1.7	0.4	0.4	4.0
Without well operations.....	165	80	4.1	27.9	3.8	8.8	24.2	53.0	13.9	60.1	6.7	8.0	74.1
Middle Atlantic Division, total.....	115	7	0.6	3.7	0.5	1.2	3.3	9.2	6.9	14.6	1.5	0.7	6.8
Drilling oil, gas, dry, or service wells, total.....	114	7	0.6	3.7	0.5	1.2	3.3	9.2	6.9	14.6	1.5	0.7	6.4
With well operations.....	11	3	0.2	1.1	0.1	0.3	0.9	2.4	2.4	4.6	0.2	0.3	3.3
Without well operations.....	103	4	0.4	2.6	0.4	0.9	2.4	6.8	4.5	10.0	1.3	0.4	3.1
East North Central Division, total.....	301	34	2.8	15.4	2.7	5.0	13.8	31.6	15.8	43.0	4.4	3.0	31.5
Drilling oil, gas, dry, or service wells, total.....	291	32	2.7	14.5	2.6	4.8	13.2	30.1	15.3	41.5	4.0	2.5	26.6
With well operations.....	26	6	0.4	2.5	0.4	0.9	2.2	5.3	2.5	7.0	0.9	0.6	5.3
Without well operations.....	265	26	2.3	12.0	2.2	3.9	11.0	24.8	12.9	34.5	3.2	2.0	21.3
Drilling in, spudding in, and tailing in, total.....	6	1	0.1	0.5	0.1	0.1	0.3	0.1	0.2	1.0	(Z)	(NA)	(NA)
Without well operations.....	6	1	0.1	0.5	0.1	0.1	0.3	0.9	0.2	1.0	(Z)	(NA)	(NA)
Ohio.....	135	8	1.2	6.2	1.2	2.1	5.8	12.7	7.6	18.5	1.8	0.8	9.7
Indiana, total.....	35	4	0.3	1.2	0.2	0.4	1.0	2.6	1.2	3.4	0.4	0.4	2.6
Central administrative offices and related facilities.....	-	-	-	-	-	-	-	-	-	-	-	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	35	4	0.2	1.2	0.2	0.3	1.0	2.6	1.2	3.4	0.4	0.3	1.9
With well operations.....	3	-	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.1	0.2	0.1	(Z)	0.6
Without well operations.....	32	4	0.2	1.1	0.2	0.3	0.9	2.3	1.1	3.2	0.3	0.3	1.3
Illinois, total.....	99	16	1.0	5.1	0.9	1.8	4.6	10.5	4.6	13.4	1.8	1.3	11.1
Drilling oil, gas, dry, or service wells, total.....	93	14	0.9	4.7	0.9	1.6	4.2	9.7	4.4	12.4	1.4	0.9	8.4
With well operations.....	8	3	0.2	1.0	0.2	0.3	0.9	2.3	1.0	2.8	0.4	0.3	2.5
Without well operations.....	85	11	0.7	3.7	0.7	1.3	3.3	7.4	3.4	9.6	1.0	0.7	6.0
West North Central Division, total.....	165	21	1.8	10.9	1.7	3.3	9.8	22.3	13.8	33.1	3.0	2.8	33.4
Drilling oil, gas, dry, or service wells, total.....	151	17	1.6	9.7	1.5	3.0	8.8	20.1	13.2	30.5	2.9	2.3	29.6
With well operations.....	18	7	0.6	3.6	0.5	1.2	3.4	8.0	5.6	12.4	1.2	1.0	16.9
Without well operations.....	133	10	1.0	6.1	1.0	1.8	5.4	12.1	7.6	18.1	1.7	1.3	12.8

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	INDUSTRY 1381.--DRILLING OIL AND GAS WELLS--Continued												
Principal Type of Service and Geographic Area--Continued													
South Atlantic Division, total.....	110	12	0.8	4.3	0.7	1.4	3.7	8.3	4.3	11.0	1.6	1.1	10.8
Drilling oil, gas, dry, or service wells, total.....	105	11	0.7	3.5	0.5	1.2	3.2	6.8	3.7	9.0	1.5	1.0	10.0
With well operations.....	5	2	0.1	0.3	(Z)	0.1	0.2	0.7	0.3	0.8	0.2	0.1	1.9
Without well operations.....	100	9	0.6	3.2	0.5	1.1	3.0	6.1	3.4	8.2	1.3	0.9	8.2
East South Central Division, total.....	168	24	1.5	9.5	1.5	2.8	8.3	20.8	13.9	31.1	3.7	2.7	28.5
Drilling oil, gas, dry, or service wells, total.....	157	18	1.2	7.8	1.2	2.3	6.9	17.6	13.0	27.6	3.1	2.1	23.7
With well operations.....	10	3	0.1	0.7	0.1	0.2	0.4	2.1	0.9	2.7	0.4	0.4	7.1
Without well operations.....	147	15	1.1	7.1	1.1	2.1	6.5	15.5	12.1	24.9	2.7	1.7	16.6
Drilling in, spudding, and tailing in.....	3	1	0.1	0.6	0.1	0.1	0.5	0.8	0.5	1.1	0.3		
Reworking well, total.....	8	5	0.2	1.1	0.2	0.4	0.9	2.4	0.4	2.5	0.3	(NA)	(NA)
With well operations.....	-	-	-	-	-	-	-	-	-	-	-	-	-
Without well operations.....	8	5	0.2	1.1	0.2	0.4	0.9	2.4	0.4	2.5	0.3	(NA)	(NA)
Alabama.....	9	1	0.1	0.5	0.4	0.2	0.5	1.3	1.2	2.0	0.4	0.2	3.5
Mississippi, total.....	33	19	1.0	6.3	0.8	1.8	5.5	13.8	10.0	21.5	2.3	1.6	19.3
Drilling oil, gas, dry, or service wells.....	26	14	0.7	5.0	0.6	1.3	4.4	11.1	9.2	18.6	1.8	1.1	15.1
West South Central, total.....	1,147	373	27.7	186.6	25.0	53.1	161.6	409.1	263.3	576.8	95.7	37.0	438.9
Central administrative offices and related facilities.....	25	5	0.3	3.5	-	-	-	-	-	-	-	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	963	293	23.1	153.0	21.2	44.0	135.2	347.9	245.4	505.0	88.3	29.7	370.2
With well operations.....	109	62	4.6	30.7	4.1	9.0	27.0	84.9	66.7	121.3	30.3	5.4	70.5
Without well operations.....	854	231	18.5	122.3	17.1	35.0	108.2	263.0	178.7	383.7	58.0	24.3	299.7
Drilling in, spudding in, and tailing in, total.....	20	5	0.7	5.2	0.6	1.3	4.5	14.2	5.1	18.0	1.2	(NA)	(NA)
With well operations.....	3	1	(Z)	0.3	(Z)	0.1	0.3	0.6	1.0	1.4	0.2	(NA)	(NA)
Without well operations.....	17	5	0.7	4.9	0.6	1.2	4.2	13.6	4.1	16.6	1.0	(NA)	(NA)
Reworking wells, total.....	139	70	3.6	24.8	3.3	7.9	21.9	47.0	12.8	53.7	6.2	(NA)	(NA)
With well operations.....	5	1	0.1	0.7	0.1	0.2	0.7	1.2	0.3	1.5	0.1	(NA)	(NA)
Without well operations.....	134	69	3.5	24.1	3.2	7.7	21.2	45.8	12.5	52.2	6.1	(NA)	(NA)
Offshore, West South Central.....	43	35	4.4	34.4	4.0	9.2	31.1	113.2	75.9	144.6	44.4	(NA)	(NA)
Drilling oil, gas, dry or service wells.....	32	26	3.6	28.1	3.3	7.7	25.6	97.1	71.0	125.1	42.9	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS--Continued													
<u>Principal Type of Service and Geographic Area--Continued</u>													
West South Central--Continued													
Louisiana, total.....	209	102	10.2	74.9	9.2	20.5	66.1	184.3	115.9	247.9	52.4	11.8	173.5
Drilling oil, gas, dry, or service wells, total.....	155	70	8.0	58.4	7.4	15.9	52.2	149.7	106.0	207.6	48.2	10.3	156.9
With well operations.....	15	12	1.2	9.3	1.2	2.6	8.7	33.7	31.7	44.3	21.2	1.1	15.1
Without well operations.....	140	58	6.8	49.1	6.2	13.3	43.5	116.0	74.3	163.3	27.0	9.2	141.8
North Louisiana, total.....	64	15	0.9	5.8	0.7	1.7	4.8	10.9	7.6	16.6	2.0	2.0	21.7
Drilling oil, gas, dry, or service wells, total.....	55	14	0.8	5.0	0.7	1.6	4.4	10.0	7.2	15.3	2.0	1.8	19.7
With well operations.....	5	3	0.1	0.7	0.1	0.3	0.6	1.4	1.3	2.4	0.3	0.5	7.8
Without well operations.....	50	11	0.7	4.3	0.6	1.3	3.8	8.6	5.9	12.9	1.7	1.3	11.9
South Louisiana, total.....	111	60	5.2	38.5	4.7	10.5	33.3	72.7	43.1	102.3	12.5	19.8	151.7
Drilling oil, gas, dry, or service wells, total.....	75	37	4.1	28.7	3.7	7.6	25.2	54.8	37.2	82.3	9.8	18.5	137.1
With well operations.....	9	8	0.6	4.7	0.5	1.2	4.2	10.9	6.5	15.6	1.9	10.5	17.3
Without well operations.....	66	29	3.5	24.0	3.2	6.4	21.0	43.9	30.7	66.7	7.9	17.9	129.9
Reworking wells.....	32	22	1.2	9.4	1.1	2.9	8.2	17.9	4.9	20.1	2.7		
Offshore Louisiana.....	34	27	3.9	30.8	3.6	8.2	28.0	100.7	66.2	129.1	37.9	(1)	(1)
Drilling oil, gas, dry, or service wells.....	25	19	3.1	24.7	2.9	6.7	22.7	84.9	61.6	110.1	36.4	(1)	(1)
Texas, total.....	699	195	13.1	85.1	11.9	24.5	74.3	173.8	115.9	254.6	34.8	19.0	206.8
Drilling oil, gas, dry, or service wells, total.....	593	158	11.2	73.1	10.4	21.3	64.9	153.0	108.6	229.5	32.0	14.6	167.1
With well operations.....	63	35	2.3	16.0	2.1	4.6	14.1	38.0	24.9	56.8	6.1	2.8	37.1
Without well operations.....	530	123	8.9	57.1	8.3	16.7	50.8	115.0	83.7	172.7	25.9	11.8	129.9
Drilling in, spudding, and tailing in, total.....	16	2	0.2	1.2	0.1	0.3	0.9	2.4	2.0	3.9	0.5	(NA)	(NA)
With well operations.....	3	-	(Z)	0.3	(Z)	0.1	0.3	0.6	1.0	1.4	0.2	(NA)	(NA)
Without well operations.....	13	2	0.2	0.9	0.1	0.2	0.6	1.8	1.0	2.5	0.3	(NA)	(NA)
Reworking wells.....	80	34	1.6	9.7	1.4	3.0	8.5	18.4	5.3	21.2	2.3	(NA)	(NA)
Texas Gulf Coast A, total.....	86	32	2.0	12.4	1.8	3.5	10.5	22.8	12.9	32.8	3.0	2.9	29.5
Drilling oil, gas, dry, or service wells, total.....	60	25	1.5	9.6	1.4	2.8	8.5	18.7	11.9	28.1	2.5	11.9	18.2
With well operations.....	7	6	0.5	3.5	0.5	0.9	3.3	7.0	6.1	12.1	1.0	10.4	12.5
Without well operations.....	53	19	1.0	6.1	0.9	1.9	5.2	11.7	5.8	16.0	1.5	11.5	15.7
Texas Gulf Coast B, total.....	43	13	0.6	4.7	0.5	1.3	3.8	10.2	4.1	12.7	1.5	11.0	11.4
Drilling oil, gas, dry, or service wells, total.....	26	5	0.2	2.2	0.2	0.6	1.8	5.4	2.8	7.5	0.7	20.6	27.7
With well operations.....	7	2	0.1	1.1	0.1	0.3	1.0	3.4	1.6	4.8	0.2	20.2	22.5
Without well operations.....	19	3	0.1	1.1	0.1	0.3	0.8	2.0	1.2	2.7	0.5	20.4	25.2
South Texas, total.....	69	23	1.7	10.2	1.5	2.8	8.9	19.9	10.0	26.9	3.0	12.4	127.1
Drilling oil, gas, dry, or service wells, total.....	58	18	1.5	8.8	1.3	2.5	7.7	17.3	8.9	23.6	2.5	11.8	121.5
With well operations.....	8	3	0.3	1.9	0.2	0.5	1.6	3.0	1.9	4.6	0.2	10.2	12.8
Without well operations.....	50	15	1.2	6.9	1.1	2.0	6.1	14.3	7.0	19.0	2.3	11.5	118.6
Southwest Texas, total.....	44	5	0.8	4.5	0.8	1.6	4.5	7.2	5.3	11.7	6.8	0.7	6.0
Central administrative offices and related facilities.....													
Drilling oil, gas, dry, or service wells.....	40	4	0.8	4.3	0.8	1.5	4.3	6.6	5.1	11.0	0.7	0.5	5.5

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS--Continued													
<u>Principal Type of Service and Geographic Area--Continued</u>													
West South Central--Continued													
Texas--Continued													
North Central Texas A, total.....	112	16	1.2	6.5	1.1	2.2	5.6	12.9	9.2	18.9	3.2	1.6	17.5
North Central Texas.....	58	12	0.6	3.4	0.5	1.0	2.5	6.5	3.7	8.8	1.3	1.0	8.0
East Texas A, total.....	33	8	0.6	3.4	0.5	1.0	2.6	8.9	4.5	12.0	1.3	1.0	11.7
East Texas B, total.....	49	12	0.8	5.5	0.8	1.6	5.0	11.1	6.8	15.4	2.5	1.0	8.8
Drilling oil, gas, dry, or service wells.....	40	8	0.6	4.2	0.6	1.2	4.0	9.0	5.5	12.6	2.0	0.8	7.5
West Texas A, total.....	125	47	3.0	23.0	2.8	6.1	20.2	44.3	34.8	70.8	8.3	5.6	60.7
Drilling oil, gas, dry or service wells, total.....	103	39	2.7	20.5	2.5	5.4	18.1	39.7	33.7	65.3	8.0	4.6	52.7
With well operations.....	8	5	0.3	2.6	0.3	0.7	2.4	4.9	3.9	8.2	0.5	0.4	6.7
Without well operations.....	95	34	2.4	17.9	2.2	4.7	15.7	34.8	29.8	57.1	7.5	4.2	46.0
West Texas B, total.....	35	11	0.6	4.4	0.6	1.3	4.0	10.8	9.6	17.6	2.8	0.9	13.7
Drilling oil, gas, dry, or service wells, total.....	31	11	0.6	4.2	0.6	1.2	3.8	10.3	9.5	17.1	2.8	0.7	12.5
With well operations.....	4	2	0.1	0.6	0.1	0.2	0.5	3.1	2.0	4.7	0.5	0.2	4.2
Without well operations.....	27	9	0.5	3.6	0.5	1.0	3.3	7.2	7.5	12.4	2.3	0.5	8.3
Texas Panhandle.....	36	8	0.5	3.9	0.5	1.1	3.7	6.8	5.8	11.9	0.6	1.1	12.4
Offshore Texas.....	9	8	0.5	3.6	0.4	1.0	3.1	12.5	9.6	15.6	6.5	(NA)	(NA)
Mountain Division, total.....	221	63	3.9	27.9	3.7	7.6	25.0	53.1	45.1	88.7	9.4	5.2	64.6
Drilling oil, gas, dry, or service wells, total.....	206	62	3.7	26.8	3.5	7.3	24.2	51.0	44.7	86.4	9.3	4.3	54.9
With well operations.....	17	13	0.8	5.3	0.8	1.6	4.9	9.5	11.3	18.6	2.2	0.6	8.7
Without well operations.....	189	49	2.9	21.5	2.7	5.7	19.3	41.5	33.4	67.8	7.1	3.7	46.3
Montana.....	36	9	0.6	4.2	0.6	1.2	3.9	7.5	9.9	15.3	2.2	0.7	9.6
Wyoming, total.....	52	14	1.1	7.8	1.0	2.2	6.9	13.7	13.2	24.3	2.6	1.3	16.0
Drilling oil, gas dry, or service wells, total.....	48	14	1.1	7.7	1.0	2.1	6.7	13.4	13.1	23.9	2.6	1.1	14.2
With well operations.....	4	3	0.3	1.7	0.3	0.6	1.7	2.8	2.7	5.2	0.3	0.1	0.8
Without well operations.....	44	11	0.8	6.0	0.7	1.5	5.0	10.6	10.4	18.7	2.3	1.1	13.3
Colorado.....	40	7	0.5	3.9	0.5	0.8	3.2	6.7	5.1	10.5	1.3	0.5	7.0
New Mexico, total.....	70	27	1.4	9.5	1.3	2.8	8.6	18.9	13.8	30.1	2.6	2.2	26.3
Drilling oil, gas, dry, or service wells.....	62	25	1.3	8.6	1.2	2.6	7.0	17.3	13.7	28.4	2.6	1.8	22.0
Pacific Division, total.....	120	47	3.9	36.6	3.3	7.2	29.8	72.9	43.6	95.5	21.1	3.0	38.8
Drilling oil, gas, dry, or service wells, total.....	112	42	3.5	33.0	3.1	7.1	28.9	71.2	43.2	93.5	20.9	2.4	30.0
Offshore Pacific, total.....	23	14	1.2	14.1	1.1	2.8	13.0	38.3	25.6	50.0	13.9	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	23	14	1.2	4.1	1.1	2.9	13.0	37.6	25.6	49.3	13.9	(NA)	(NA)
With well operations.....	-	-	-	-	-	-	-	-	-	-	-	(NA)	(NA)
Without well operations.....	23	14	1.2	14.1	1.1	2.9	13.0	37.6	25.6	49.3	13.9	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1382.--OIL AND GAS EXPLORATION SERVICES													
Total.....	636	99	8.4	53.1	6.6	15.9	39.4	126.4	45.5	152.0	20.0	8.7	90.0
Offshore.....	27	13	1.1	7.9	1.0	2.9	6.2	23.4	8.7	28.0	4.1	(NA)	(NA)
<u>Geographic Areas</u>													
Northeast Region.....	21	2	0.1	0.6	0.1	0.2	0.4	1.3	0.4	1.6	0.2	(NA)	(NA)
East North Central Division.....	33	-	0.1	0.7	0.1	0.2	0.6	1.5	0.4	1.7	0.2	(NA)	(NA)
West North Central Division, total.....	24	1	0.1	0.8	0.1	0.2	0.5	1.9	0.7	2.4	0.2	0.3	2.1
South Atlantic Division, total.....	21	3	0.1	0.8	0.1	0.3	0.7	1.5	0.7	1.9	0.3	(NA)	(NA)
Florida.....	13	2	0.1	0.6	0.1	0.2	0.5	1.0	0.5	1.3	0.2	(NA)	(NA)
East South Central Division, total.....	39	3	0.3	1.9	0.3	0.7	1.7	4.1	1.8	5.1	0.8	(NA)	(NA)
West South Central Division, total.....	325	68	5.6	35.3	4.5	11.1	25.5	86.7	31.3	103.9	14.2	6.4	60.6
Louisiana, total.....	65	18	1.9	10.9	1.6	4.3	8.1	30.5	11.5	38.2	3.8	1.6	17.1
North Louisiana.....	18	3	0.4	2.2	0.2	0.4	1.2	7.4	1.1	8.2	0.3	(Z)	0.6
South Louisiana.....	38	10	1.1	6.3	1.0	2.4	5.5	15.3	6.2	19.1	2.4	1.6	16.5
Offshore Louisiana.....	9	5	0.4	2.4	0.4	1.4	1.3	7.8	4.1	10.9	1.1	(1)	(1)
Texas, total.....	205	40	3.1	20.0	2.5	5.9	14.5	48.8	17.5	56.9	9.4	4.1	36.1
Texas Gulf Coast A.....	65	12	1.1	6.5	0.9	2.0	5.0	13.8	6.7	17.5	3.1	1.3	10.0
Texas Gulf Coast B.....	8	-	0.1	0.6	(Z)	0.1	0.5	2.6	0.8	3.1	0.3	(NA)	(NA)
South Texas.....	9	2	0.1	0.7	0.1	0.2	0.5	1.6	0.5	1.8	0.3	1.3	2.0
Southwest Texas.....	11	3	0.1	1.0	0.1	0.2	0.4	1.2	0.6	1.5	0.3	0.3	2.4
East Texas A.....	30	5	0.4	1.8	0.3	0.6	1.4	3.3	0.6	3.7	0.2	1.2	12.7
East Texas B.....	7	3	0.2	1.1	0.1	0.2	0.4	1.0	0.1	1.1	(Z)	0.3	2.3
West Texas A.....	38	10	0.7	5.1	0.6	1.4	3.8	14.2	5.5	16.9	2.8	0.7	5.9
Texas Panhandle.....	13	1	0.1	0.4	0.1	0.2	0.4	1.3	0.5	1.5	0.3	(NA)	(NA)
Mountain Division, total.....	117	7	0.9	5.0	0.7	1.6	4.3	13.5	4.6	16.1	2.0	0.6	6.3
Wyoming.....	24	2	0.3	1.3	0.2	0.5	1.1	3.1	1.0	3.7	0.4	0.2	2.4
Colorado.....	35	3	0.2	1.2	0.1	0.3	1.1	3.7	0.7	4.2	0.2	0.1	1.3
New Mexico.....	19	2	0.3	1.8	0.3	0.6	1.5	5.0	2.1	6.2	0.9	0.2	1.3
Pacific Division, total.....	56	15	1.0	8.0	0.7	1.6	5.6	15.7	5.6	19.3	2.1	1.0	18.1
California, total.....	44	8	0.7	5.8	0.4	1.0	3.4	8.5	4.0	11.2	1.3	0.7	11.5
East Central California.....	15	2	0.1	0.8	0.1	0.3	0.7	1.7	1.6	3.1	0.2	(NA)	(NA)
South California.....	14	4	0.3	2.5	0.1	0.1	0.5	1.1	0.3	1.3	0.1	(NA)	(NA)
<u>Principal Type of Service and Geographic Area</u>													
Total.....	636	99	8.4	53.1	6.6	15.9	39.4	126.4	45.5	152.0	20.0	8.7	90.0
Central administrative offices and related facilities.....	11	7	0.7	5.6	-	-	-	-	-	-	-	(NA)	(NA)
Geophysical exploration.....	584	86	7.0	43.1	6.1	14.7	36.0	118.7	42.4	142.6	18.5	8.3	81.9
Other exploration.....	41	6	0.7	4.3	0.5	1.2	3.4	7.6	3.1	9.3	1.4	0.4	8.1
West South Central.....	325	68	5.6	35.3	4.5	11.1	25.5	86.7	31.3	103.9	14.2	6.4	60.6
Geophysical exploration.....	299	59	4.7	28.4	4.1	10.2	22.9	81.0	29.1	97.2	12.8	6.2	59.1
Other exploration.....	20	5	0.5	3.4	0.4	0.9	2.6	5.8	2.2	6.6	1.4	0.1	1.5
Louisiana.....	65	18	1.9	10.9	1.6	4.3	8.1	30.5	11.5	38.2	3.8	1.6	17.1
Texas.....	205	40	3.1	19.9	2.5	5.9	14.5	48.8	17.5	56.9	9.4	4.1	36.1
Geophysical exploration.....	193	36	2.8	17.9	2.3	5.6	13.9	45.4	17.1	53.1	9.3	4.0	35.0
Mountain.....	117	7	0.9	5.0	0.7	1.6	4.3	13.5	4.6	16.1	2.0	(NA)	(NA)
Geophysical exploration.....	107	6	0.8	4.3	0.6	1.4	3.9	12.5	3.9	14.4	2.0	(NA)	(NA)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.													
<u>Geographic Areas</u>													
United States, total.....	3,895	751	54.8	358.7	45.3	98.2	274.4	770.4	288.8	971.0	88.2	48.3	498.0
Offshore United States.....	61	26	2.7	26.4	2.3	5.7	22.4	94.6	47.8	127.2	15.3	(NA)	(NA)
Northeast Region.....	72	3	0.5	4.0	0.3	0.7	2.0	6.2	2.0	7.6	0.6	(NA)	(NA)
Pennsylvania.....	58	2	0.3	2.1	0.3	0.7	1.8	5.7	1.9	7.1	0.6	(NA)	(NA)
East North Central.....	241	33	2.0	11.9	1.7	3.8	9.3	27.5	11.4	35.9	3.0	(NA)	(NA)
Ohio.....	69	5	0.4	2.2	0.3	0.7	1.8	7.0	4.1	10.1	0.9	0.1	0.8

See footnotes at end of table.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.													
<u>Geographic Areas--Continued</u>													
West North Central Division, total.....	337	41	2.8	16.1	2.5	5.3	13.8	35.6	13.0	45.2	3.4	(NA)	(NA)
Nebraska.....	33	6	0.3	1.6	0.3	0.6	1.4	4.1	1.5	4.8	0.8	0.3	2.7
Kansas.....	267	26	2.0	11.5	1.8	3.9	9.7	25.8	8.8	32.3	2.2	2.0	16.1
South Atlantic Division, total.....	64	4	0.4	2.3	0.3	0.7	1.8	6.3	2.7	8.4	0.6	(NA)	(NA)
West Virginia.....	55	4	0.3	2.2	0.3	0.6	1.7	6.0	2.6	8.0	0.6	(NA)	(NA)
East South Central Division, total.....	122	20	1.3	7.2	1.1	2.3	5.9	18.4	6.3	22.7	2.0	(NA)	(NA)
Kentucky.....	39	6	0.3	1.9	0.3	0.6	1.6	3.7	1.2	4.7	0.2	(NA)	(NA)
Alabama.....	11	2	0.1	0.4	0.1	0.2	0.4	0.9	0.3	1.1	0.1	(NA)	(NA)
Mississippi.....	72	12	0.8	4.8	0.7	1.5	3.9	13.7	4.8	16.9	1.7	0.5	4.3
West South Central Division, total.....	2,307	493	37.9	245.3	30.7	67.0	182.4	498.4	192.9	635.1	56.2	37.2	396.5
Arkansas.....	45	6	0.3	1.9	0.3	0.6	1.5	4.9	1.5	5.8	0.6	0.4	2.4
Louisiana.....	382	117	10.4	76.6	8.7	20.1	60.6	183.5	77.9	236.6	24.9	10.5	104.6
North Louisiana.....	123	18	1.2	7.3	1.1	2.3	6.1	15.9	4.6	18.9	1.6	0.6	4.8
South Louisiana.....	227	79	7.0	49.9	5.8	13.1	38.0	106.7	39.0	133.1	12.6	10.0	199.8
Offshore Louisiana.....	32	20	2.1	19.3	1.9	4.7	16.5	61.0	34.4	84.6	10.7	(1)	(1)
Oklahoma.....	417	71	5.9	37.3	4.1	8.6	21.1	63.4	20.3	77.7	6.0	4.3	26.7
Texas.....	1,463	299	21.2	129.6	17.6	37.7	99.2	246.7	93.1	315.1	24.8	22.0	262.8
Texas Gulf Coast A.....	200	51	4.0	29.8	2.9	6.5	19.4	42.7	19.1	56.2	5.5	12.7	128.6
Texas Gulf Coast B.....	71	17	1.0	4.6	0.9	1.8	4.0	11.5	4.5	14.7	1.3	10.5	12.9
South Texas.....	139	22	2.4	13.6	2.0	3.9	10.7	22.1	11.3	31.3	2.1	11.0	18.9
Southwest Texas.....	60	8	0.5	2.7	0.4	0.9	2.2	6.6	2.8	8.8	0.6	0.2	1.3
North Central Texas A.....	174	18	1.3	7.5	1.2	2.5	6.2	16.1	5.3	19.8	1.6	1.0	6.0
North Central Texas B.....	103	12	0.8	4.6	0.7	1.6	3.9	9.7	3.0	11.8	1.0	0.5	4.9
East Texas B.....	107	23	1.5	8.6	1.2	2.6	6.7	19.1	6.9	23.7	2.3	1.3	11.4
West Texas A.....	413	108	6.7	38.5	5.8	12.5	31.3	84.0	27.8	104.6	7.2	13.1	183.4
West Texas B.....	62	15	1.3	8.0	1.2	2.5	6.8	15.5	7.1	21.4	1.2	0.5	3.0
Texas Panhandle.....	89	18	1.0	6.4	0.9	2.0	5.1	15.0	4.6	18.0	1.6	0.9	8.1
Mountain Division, total.....	450	84	5.2	32.6	4.5	9.5	26.5	79.4	26.7	97.2	8.9	3.1	28.9
Montana.....	46	5	0.4	3.2	0.4	0.9	2.6	7.1	2.4	8.8	0.6	0.3	2.5
Wyoming.....	116	20	1.4	9.1	1.2	2.6	7.4	22.2	7.3	27.0	2.5	0.7	8.0
Colorado.....	76	11	0.6	3.6	0.4	0.9	2.6	7.7	2.3	8.9	1.2	0.2	2.4
New Mexico, total.....	178	38	2.4	14.0	2.1	4.3	11.4	34.3	12.3	43.0	3.6	1.6	13.0
West New Mexico.....	44	5	0.4	2.7	0.3	0.7	2.2	7.3	2.8	9.3	0.9	0.2	1.6
East New Mexico.....	134	33	2.0	11.3	1.8	3.6	9.2	27.0	9.5	33.8	2.7	1.4	11.4
Utah.....	24	9	0.4	2.4	0.3	0.7	2.1	7.1	2.1	8.4	0.9	0.3	3.0
Pacific Division, total.....	302	73	4.8	39.4	4.1	8.9	32.6	98.5	33.9	118.9	13.5	2.6	28.6
Offshore Pacific.....	16	3	0.3	6.5	0.3	0.9	5.5	32.2	13.0	40.9	4.5	(NA)	(NA)
California.....	278	69	4.4	32.4	3.8	8.0	26.9	63.9	19.0	75.2	7.6	2.6	27.2
East Central California.....	96	29	1.6	11.2	1.5	2.9	9.4	26.2	6.2	28.2	4.2	(NA)	(NA)
Central Coastal California.....	42	12	0.7	5.4	0.6	1.3	4.9	8.8	4.0	11.9	1.0	(NA)	(NA)
South California.....	110	27	1.8	14.2	1.5	3.2	11.1	24.0	7.6	29.5	2.0	(NA)	(NA)
<u>Principal Type of Service and Geographic Area</u>													
United States, total.....	3,895	751	54.8	358.7	45.3	98.2	274.4	770.4	288.8	971.0	88.2	48.3	498.0
Central administrative offices and related facilities.....													
Well surveying and well logging.....	239	69	5.6	44.4	4.2	9.4	32.4	103.8	33.4	126.6	10.6	11.1	173.8
Cementing wells.....	109	50	5.1	43.0	4.3	11.7	35.8	114.0	59.1	159.7	13.3		
Acidizing and other chemical treatment of wells.....	83	39	2.3	16.0	1.7	4.4	10.5	55.4	27.5	77.4	5.6	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	224	85	4.6	25.7	4.1	8.4	22.5	51.2	13.7	59.2	5.7	5.9	52.6
With well operations.....	26	10	0.5	2.3	0.4	0.8	1.9	4.9	1.5	5.8	0.6	0.4	3.3
Without well operations.....	198	75	4.1	23.4	3.7	7.6	20.6	46.3	12.2	53.4	5.1	5.5	49.3

See footnotes at end of table.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.--Continued													
<u>Principal Type of Service and Geographic Area--Continued</u>													
Cleaning out, bailing out, or swabbing wells.....	155	48	3.2	18.4	2.8	5.9	15.9	37.1	10.6	43.9	3.8	2.8	22.1
With well operations.....	15	4	0.3	1.3	0.2	0.5	1.1	2.7	0.7	3.1	0.3	0.1	0.9
Without well operations.....	140	44	2.9	17.1	2.6	5.4	14.8	34.4	9.9	40.8	3.5	2.7	21.2
Perforating well casing.....	77	25	1.4	9.5	1.0	2.1	6.7	22.7	5.2	26.8	1.2	1.6	24.2
With well operations.....	6	-	(Z)	0.2	(Z)	0.1	0.2	0.5	0.2	0.7	0.1	(NA)	(NA)
Without well operations.....	71	25	1.4	9.3	1.0	2.0	6.5	22.2	5.0	26.1	1.1	(NA)	(NA)
Installing production equipment.....	81	33	1.9	11.8	1.7	3.9	10.5	26.8	12.0	36.1	2.7	2.3	16.8
With well operations.....	4	2	0.1	0.4	0.1	0.2	0.4	0.9	0.3	1.1	0.1	0.1	0.4
Without well operations.....	77	31	1.8	11.4	1.6	3.7	10.1	25.9	11.7	35.0	2.6	2.2	16.4
Pumping wells, but not operating leases	56	10	0.7	3.6	0.6	1.3	3.2	9.4	1.3	7.5	3.2	0.6	4.0
With well operations.....	5	2	0.1	0.3	0.1	0.1	0.3	0.7	0.2	0.8	0.1	(Z)	0.2
Without well operations.....	51	8	0.6	3.3	0.5	1.2	2.9	8.7	1.1	6.7	3.1	0.5	3.8
All other oil and gas field services, n.e.c.....	2,848	378	27.9	166.2	24.7	51.0	136.9	349.5	125.9	433.1	42.3	18.3	142.7
With well operations.....	33	13	0.6	3.4	0.5	1.0	2.7	6.8	2.0	7.7	1.1	0.6	9.5
Without well operations.....	2,815	365	27.3	162.8	24.2	50.0	134.2	342.7	123.9	425.4	41.2	17.7	133.2
East North Central Division, total.....	241	33	2.0	11.9	1.7	3.8	9.3	27.5	11.4	35.9	3.0	(NA)	(NA)
Well surveying and well logging....	7	2	0.1	0.9	0.1	0.2	0.7	2.3	0.7	2.7	0.3	(NA)	(NA)
Cementing wells.....	14	3	0.2	1.9	0.2	0.6	1.7	5.3	2.6	7.1	0.7	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	5	3	0.2	1.2	0.1	0.3	0.8	4.4	2.3	6.3	0.3	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	18	6	0.3	1.6	0.3	0.6	1.4	3.0	0.8	3.4	0.4	(NA)	(NA)
With well operations.....	7	2	0.1	0.5	0.1	0.2	0.4	1.2	0.4	1.4	0.1	(NA)	(NA)
Without well operations.....	11	4	0.2	1.1	0.2	0.4	1.0	1.8	0.4	2.0	0.3	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	10	1	0.1	0.5	0.1	0.1	0.4	1.0	0.3	1.2	0.1	(NA)	(NA)
Perforating well casing.....	7	2	0.1	0.6	0.1	0.2	0.5	1.4	0.3	1.7	0.1	(NA)	(NA)
Installing production equipment....	6	2	0.1	0.5	0.1	0.2	0.3	0.9	1.4	2.2	0.1	(NA)	(NA)
West North Central Division, total.....	337	41	2.8	16.1	2.5	5.3	13.8	35.6	13.0	45.2	3.4	(NA)	(NA)
Well surveying and well logging....	14	4	0.2	1.3	0.1	0.3	0.9	3.1	0.8	3.6	0.3	(NA)	(NA)
Cementing wells.....	11	6	0.4	3.1	0.3	0.9	2.8	8.1	4.0	10.8	1.2	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	7	2	0.1	0.8	0.1	0.2	0.5	3.1	1.4	4.3	0.2	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	25	4	0.3	1.8	0.3	0.7	1.7	3.2	0.7	3.7	0.2	(NA)	(NA)
With well operations.....	3	-	(Z)	0.2	(Z)	0.1	0.2	0.4	0.1	0.5	(Z)	(NA)	(NA)
Without well operations.....	22	4	0.3	1.6	0.3	0.6	1.5	2.8	0.6	3.2	0.2	(NA)	(NA)
Perforating well casing.....	6	-	0.1	0.3	(Z)	0.1	0.3	1.1	0.2	1.2	(Z)	(NA)	(NA)
Installing production equipment....	5	4	0.1	0.7	0.1	0.3	0.7	1.4	0.2	1.5	0.1	(NA)	(NA)
South Atlantic Division, total.....	64	4	0.4	2.3	0.3	0.7	1.8	6.3	2.7	8.4	0.6	(NA)	(NA)
East South Central Division, total.....	123	20	1.3	7.3	1.1	2.3	5.9	20.0	6.8	24.7	2.0	(NA)	(NA)
Well surveying and well logging....	6	2	0.1	1.1	0.1	0.2	0.8	4.2	1.1	4.8	0.5	(NA)	(NA)
Cementing wells.....	6	4	0.2	1.8	0.2	0.5	1.5	4.2	2.1	5.9	0.4	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	6	3	0.1	0.5	0.1	0.2	0.5	1.0	0.4	1.2	0.2	(NA)	(NA)
West South Central Division, total.....	2,307	493	37.8	245.3	30.7	67.0	182.4	498.4	192.9	635.1	56.2	37.2	396.5
Well surveying and well logging....	124	45	4.2	33.9	3.1	7.1	24.3	70.9	24.1	88.0	7.1	10.3	162.5
Cementing wells.....	43	21	3.2	27.3	2.7	7.2	22.1	72.0	37.3	102.0	7.3		
Acidizing and other chemical treatment of wells.....	48	21	1.4	10.0	1.0	2.7	6.3	32.7	15.9	45.6	3.1		
Running, cutting, and pulling, casing, tubes, or rods.....	138	59	3.0	17.0	2.7	5.5	14.6	34.3	9.0	39.4	3.9	3.8	34.6
With well operations.....	11	6	1.2	1.2	0.2	0.4	1.0	2.4	0.7	2.8	0.3	0.3	2.2
Without well operations.....	127	53	2.8	15.8	2.5	5.1	13.6	31.9	8.3	36.6	3.6	3.6	32.4

See footnotes at end of table.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.--Continued													
<u>Principal Type of Service and Geographic Area--Continued</u>													
West South Central Division--Continued													
Cleaning out, bailing out, or swabbing wells.....	111	38	2.4	13.3	2.2	4.5	11.5	28.0	8.3	33.4	2.9	2.1	16.4
With well operations.....	11	4	0.2	1.1	0.2	0.4	1.0	2.3	0.5	2.6	0.2	0.1	0.4
Without well operations.....	100	34	2.2	12.2	2.0	4.1	10.5	25.7	7.8	30.8	2.7	2.0	15.9
Perforating well casing.....	45	15	0.9	6.4	0.6	1.4	4.4	15.0	3.8	17.9	0.8	1.4	19.9
With well operations.....	5	-	(Z)	0.2	(Z)	0.1	0.1	0.5	0.2	0.6	0.1	-	-
Without well operations.....	40	15	0.9	6.2	0.6	1.3	4.3	14.5	3.6	17.3	0.7	1.4	19.9
Installing production equipment....	44	18	1.0	7.0	0.9	2.4	6.4	17.7	7.6	23.5	1.8	1.5	11.6
Pumping wells, but not operating leases.....	38	5	0.4	2.1	0.3	0.7	1.8	3.7	0.8	3.9	0.4	0.4	2.4
With well operations.....	3	1	(Z)	0.2	(Z)	0.1	0.2	0.4	0.2	0.5	(Z)	(Z)	0.1
Without well operations.....	35	4	0.4	1.9	0.3	0.6	1.6	3.3	0.6	3.4	0.4	0.4	2.3
All other oil and gas field services, n.e.c.....	1,699	260	19.4	112.1	17.0	35.5	91.0	224.0	86.1	281.2	29.0	12.8	90.1
With well operations.....	16	7	0.3	1.4	0.2	0.5	1.2	3.4	0.7	3.7	0.5	0.3	6.8
Without well operations.....	1,683	253	19.1	110.7	16.8	35.0	89.8	220.6	85.4	277.5	28.5	12.4	83.3
Louisiana.....	382	117	10.4	76.5	8.7	20.1	60.6	183.5	77.9	236.6	24.8	10.5	104.6
Well surveying and well logging....	28	12	1.1	9.5	0.9	2.0	8.2	36.6	10.7	44.0	3.3	3.9	59.8
Cementing wells.....	9	6	1.4	11.8	1.0	2.7	8.5	32.1	16.0	44.9	3.2		
Running, cutting, and pulling casing, tubes, or rods.....	16	9	0.4	2.7	0.3	0.7	2.2	5.9	2.2	6.6	0.5	0.5	3.8
Cleaning out, bailing out, or swabbing wells.....	24	8	0.4	3.5	0.4	0.9	2.7	7.5	1.2	8.3	0.6	(NA)	(NA)
Installing production equipment....	5	2	0.3	3.1	0.3	1.0	3.1	9.2	4.4	12.7	0.9	(NA)	(NA)
Pumping wells, but not operating leases.....	6	2	0.1	0.6	0.1	0.1	0.4	1.0	0.1	1.0	(Z)	(NA)	(NA)
North Louisiana.....	123	18	1.2	7.3	1.1	2.3	6.1	15.9	4.6	18.9	1.6	0.6	4.8
South Louisiana, total.....	224	79	7.0	49.9	5.8	13.1	37.9	106.5	38.9	132.9	12.5	19.9	199.8
Well surveying and well logging....	13	8	0.6	4.9	0.5	1.1	4.0	15.3	4.0	18.1	1.3	13.9	159.2
Cementing wells.....	5	4	0.9	7.8	0.6	1.6	4.9	18.9	8.8	25.1	2.6	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	8	5	0.2	1.6	0.2	0.3	1.2	3.3	0.6	3.6	0.3	10.3	12.6
Cleaning out, bailing out, or swabbing wells.....	18	6	0.4	2.6	0.3	0.7	2.1	6.1	0.9	6.5	0.5	10.2	12.5
Offshore Louisiana.....	32	20	2.1	19.3	1.9	4.7	16.5	60.9	34.4	84.6	10.7	(1)	(1)
Oklahoma.....	417	71	5.9	37.3	4.1	8.6	21.0	63.4	20.3	77.7	6.0	4.3	26.7
Acidizing and other chemical treatment of wells.....	8	4	0.4	2.9	0.2	0.7	1.6	8.9	3.8	11.8	1.0	0.1	0.8
Running, cutting, and pulling casing, tubes, or rods.....	24	5	0.4	1.8	0.3	0.7	1.6	4.3	1.0	4.7	0.5	0.6	4.3
With well operations.....	5	2	0.1	0.5	0.1	0.2	0.4	1.0	0.4	1.2	0.1	-	-
Without well operations.....	19	3	0.3	1.3	0.2	0.5	1.2	3.3	0.6	3.5	0.4	0.6	4.3
Cleaning out, bailing out, or swabbing wells.....	21	14	0.8	4.0	0.8	1.5	3.7	7.3	2.2	8.6	0.9	0.6	4.2
Perforating well casing.....	4	2	0.1	0.9	0.1	0.2	0.7	2.1	0.3	2.3	(Z)	0.1	1.3
Texas.....	1,463	299	21.2	129.6	17.6	37.7	99.2	246.7	93.1	315.1	24.8	22.0	262.8
Well surveying and well logging....	78	25	2.6	21.1	1.8	4.1	13.6	25.8	11.4	34.0	3.1	5.5	100.7
Cementing wells.....	25	14	1.5	12.8	1.4	3.7	11.3	31.7	17.0	45.5	3.2		
Acidizing and other chemical treatment of wells.....	36	16	1.0	6.8	0.7	1.8	4.4	22.7	11.4	32.2	1.9	3.6	44.8
Running, cutting, and pulling casing, tubes, or rods.....	94	43	2.2	12.0	2.0	3.9	10.4	23.1	6.6	27.1	2.7	2.5	25.3
With well operations.....	4	3	0.1	0.4	0.1	0.1	0.4	0.9	0.2	1.0	0.2	0.1	1.3
Without well operations.....	90	40	2.1	11.6	1.9	3.8	10.0	22.2	6.4	26.1	2.5	2.4	24.0
Cleaning out, bailing out, or swabbing wells.....	65	16	1.1	5.9	1.0	2.0	5.0	13.1	4.7	16.5	1.3	1.1	8.8
With well operations.....	5	1	0.1	0.4	0.1	0.1	0.3	0.9	0.2	1.0	0.1	-	-
Without well operations.....	60	15	1.0	5.5	0.9	1.9	4.7	12.2	4.5	15.5	1.2	1.1	8.8

See footnotes at end of table.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1389. OIL AND GAS FIELD SERVICES, N.E.C.--Continued													
<u>Principal Type of Service and Geographic Area--Continued</u>													
West South Central Division--Continued													
Texas--Continued													
Perforating well casing.....	34	10	0.5	3.6	0.4	0.9	2.7	8.6	2.9	10.9	0.6	1.2	17.9
Installing production equipment....	26	10	0.4	2.6	0.4	0.9	2.3	5.6	2.5	7.4	0.7	0.7	4.0
Pumping wells, but not operating leases.....	22	1	0.2	0.9	0.1	0.3	0.8	1.5	0.5	1.8	0.3	0.3	1.7
All other oil and gas field services, n.e.c.....	1,075	159	11.0	62.9	9.7	19.9	48.8	114.8	35.0	139.8	10.9	6.3	53.1
With well operations.....	8	3	0.1	0.8	0.1	0.3	0.7	2.2	0.3	2.3	0.2	0.2	4.0
Without well operations.....	1,067	156	10.9	62.1	9.6	19.6	48.1	112.6	35.7	137.5	10.7	6.1	49.1
Texas Gulf Coast A, total.....	200	51	4.0	29.8	2.9	6.5	19.4	42.7	19.1	56.2	5.5	2.7	28.6
Well surveying and well logging..	12	7	0.9	8.1	0.6	1.4	4.6	7.1	2.4	8.4	9.1	0.1	1.3
Running, cutting, and pulling casing, tubes, or rods.....	8	2	0.1	0.5	0.1	0.1	0.5	1.1	0.3	1.2	0.2	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	9	1	0.1	0.7	0.1	0.2	0.6	1.8	2.1	3.6	0.3	0.1	1.1
Perforating well casing.....	4	2	0.1	0.5	0.1	0.2	0.5	1.7	0.6	2.1	0.2	(NA)	(NA)
Texas Gulf Coast B, total.....	71	17	1.0	4.6	0.9	1.8	4.0	11.5	4.5	14.7	1.3	(NA)	(NA)
Well surveying and well logging..	6	2	0.2	0.6	0.1	0.3	0.5	2.7	0.7	3.1	0.3	(NA)	(NA)
Cementing wells.....	4	2	0.1	0.8	0.1	0.3	0.7	2.1	1.2	3.1	0.2	(NA)	(NA)
Perforating well casing.....	3	2	0.1	0.4	(Z)	0.1	0.4	0.7	1.0	1.6	0.1	(NA)	(NA)
South Texas.....	139	22	2.4	13.6	2.0	3.9	10.7	22.1	11.3	31.3	2.1	1.0	8.9
Well surveying and well logging..	10	2	0.5	4.2	0.4	0.8	2.9	3.0	4.4	6.9	0.5	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	9	1	0.1	0.5	0.1	0.2	0.5	1.1	0.2	1.3	0.1	0.1	0.5
North Central Texas A, total.....	174	18	1.3	7.5	1.2	2.5	6.2	16.1	5.3	19.8	1.6	0.9	6.0
Acidizing and other chemical treatment of wells.....	8	3	0.1	0.9	0.1	0.2	0.6	2.2	1.0	3.0	0.2	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	12	5	0.2	1.2	0.2	0.5	0.1	2.4	0.5	2.6	0.4	0.2	1.7
North Central Texas B.....	103	12	0.8	4.6	0.7	1.6	3.9	9.7	3.0	11.8	1.0	0.5	4.9
Well surveying and well logging..	9	2	0.1	1.0	0.1	0.2	0.7	1.8	0.4	2.1	0.2	0.1	1.0
Running, cutting, and pulling casing, tubes, or rods.....	13	2	0.2	0.8	0.2	0.3	0.7	1.6	0.4	1.7	0.2	0.2	1.7
East Texas B.....	107	23	1.5	8.6	1.2	2.6	6.7	19.1	6.9	23.7	2.3	1.3	11.4
Well surveying and well logging..	6	2	0.2	1.4	0.1	0.3	0.9	2.1	0.6	2.5	0.2	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	10	6	0.2	1.1	0.2	0.4	0.7	2.3	0.8	2.5	0.6	0.3	2.1
West Texas A.....	398	106	6.5	37.7	5.7	12.3	30.7	82.3	27.2	102.5	7.0	13.2	183.4
Well surveying and well logging..	17	5	0.5	3.8	0.3	0.8	2.7	5.8	1.8	7.1	0.5	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	10	4	0.5	3.1	0.3	0.7	1.7	10.3	5.3	15.0	0.6	3.5	42.9
Running, cutting, and pulling casing, tubes, or rods.....	21	14	0.8	4.9	0.8	1.5	4.4	10.0	3.0	12.1	9.0	0.8	6.6
Cleaning out, bailing out, or swabbing wells.....	14	6	0.4	2.0	0.4	0.6	1.7	4.2	0.9	4.8	0.3	0.4	3.1
Perforating well casing.....	4	2	0.1	0.8	0.1	0.2	0.5	1.5	0.4	1.8	(Z)	(NA)	(NA)
Installing production equipment..	10	5	0.2	1.0	0.2	0.4	0.9	2.3	1.2	3.1	0.4	0.2	1.8
West Texas B.....	62	15	1.3	8.0	1.2	2.5	6.8	15.5	7.1	21.4	1.2	0.5	3.0
Running, cutting, and pulling casing, tubes, or rods.....	5	3	0.2	0.9	0.1	0.3	0.9	1.2	0.5	1.6	0.1	0.2	1.6
Texas Panhandle.....	89	18	10.0	6.4	0.9	2.0	5.1	15.0	4.6	18.0	1.6	0.9	8.1
Acidizing and other chemical treatment of wells.....	4	3	0.1	0.9	0.1	0.3	0.6	3.0	1.2	3.7	0.4	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	11	5	0.3	1.5	0.2	0.6	1.4	2.7	0.6	3.1	0.2	0.2	1.8
Cleaning out, bailing out, or swabbing wells.....	8	4	0.1	1.0	0.1	0.3	0.8	2.6	0.7	3.0	0.3	0.2	1.2

See footnotes at end of table.

Table 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.--Continued													
Principal Type of Service and Geographic Area--Continued													
Mountain Division, total.....	451	85	5.3	33.1	4.5	9.7	27.0	80.3	26.9	98.3	9.0	3.1	28.9
Well surveying and well logging....	41	10	0.6	3.8	0.4	0.9	2.9	11.9	3.3	13.8	1.4	0.1	1.7
Acidizing and other chemical treatment of wells.....	14	8	0.4	2.6	0.3	0.8	1.9	10.3	6.0	14.6	1.7	(Z)	0.8
Running, cutting, and pulling casing, tubes, or rods.....	18	9	0.5	3.2	0.5	1.0	2.9	6.5	2.1	7.9	0.7	0.7	6.7
Cleaning out, bailing out, or swabbing wells.....	8	2	1.6	1.4	0.1	0.3	1.2	2.7	0.7	3.1	0.3	0.2	1.2
Perforating well casing.....	9	4	0.1	0.9	0.1	0.2	0.6	2.3	0.4	2.5	0.1	(NA)	(NA)
Installing production equipment....	19	7	0.4	2.0	0.4	0.6	1.8	3.9	0.9	4.4	0.4	0.3	2.0
Pumping wells, hut not operating leases.....	5	1	0.1	0.5	0.1	0.2	0.5	1.0	0.1	1.1	0.1	0.1	0.7
Wyoming, total.....	116	20	1.4	9.1	1.2	2.6	7.4	22.2	7.3	27.0	2.5	0.7	8.0
Well surveying and well logging....	10	3	0.2	1.3	0.1	0.3	0.9	3.1	1.0	3.7	0.4	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	7	3	0.2	1.2	0.2	0.3	1.0	2.0	1.0	2.7	0.3	0.2	2.6
Perforating well casing.....	3	2	0.1	0.4	(Z)	0.1	0.3	1.0	0.2	1.2	0.1	(NA)	(NA)
Colorado, total.....	76	11	0.6	3.6	0.4	0.9	2.6	7.7	2.3	8.9	1.2	0.2	2.4
Well surveying and well logging....	6	2	0.1	0.6	0.1	0.1	0.5	1.9	0.3	1.9	0.3	(NA)	(NA)
New Mexico, total.....	178	38	2.4	13.9	2.1	4.3	11.4	34.3	12.3	43.0	3.6	1.6	13.0
Well surveying and well logging....	14	2	0.2	1.1	0.1	0.3	0.8	3.9	1.0	4.7	0.3	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	8	5	0.2	1.6	0.2	0.4	1.1	5.9	3.5	8.5	1.0	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	10	6	0.3	1.8	0.3	0.7	1.5	3.7	1.0	4.4	0.3	(Z)	0.7
Installing production equipment....	7	2	0.1	0.6	0.1	0.2	0.5	1.3	0.4	1.5	0.2	(NA)	(NA)
West New Mexico.....	44	5	0.4	2.7	0.3	0.7	2.2	7.3	2.8	9.3	0.9	0.2	1.6
Well surveying and well logging..	6	-	(Z)	0.4	(Z)	0.1	0.3	1.2	0.3	1.4	0.1	(NA)	(NA)
East New Mexico.....	130	33	20.0	11.2	1.7	3.6	9.1	26.7	9.4	33.4	2.7	1.4	11.4
Well surveying and well logging..	8	2	0.1	0.8	0.1	0.2	0.6	2.8	0.7	3.3	0.2	(NA)	(NA)
Pacific Division, total.....	302	73	4.8	39.4	4.1	8.9	32.6	98.5	33.9	118.9	13.5	2.6	28.6
Well surveying and well logging....	39	5	0.4	2.9	0.3	0.6	2.4	10.3	2.9	12.3	1.0	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	5	2	0.1	0.4	0.1	0.1	0.4	1.2	0.2	1.3	(Z)	(NA)	(NA)
Running, cutting, and pulling casing, tubes or rods.....	13	3	0.2	1.4	0.2	0.3	1.3	2.5	0.1	2.7	0.3	0.2	2.0
Cleaning out, bailing out, or swabbing wells.....	12	5	0.3	2.4	0.3	0.6	2.1	4.1	1.0	4.6	0.3	0.2	1.8
Pumping wells, hut not operating leases.....	5	1	0.1	0.5	0.1	0.2	0.5	3.8	0.1	1.4	2.5	(NA)	(NA)
California, total.....	278	69	4.4	32.4	3.8	8.0	26.9	63.9	19.0	75.2	7.6	2.6	27.2
Well surveying and well logging....	32	4	0.3	2.4	0.2	0.5	1.9	8.2	2.0	9.5	0.6	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	5	2	0.1	0.4	0.1	0.1	0.4	1.2	0.2	1.3	(Z)	(Z)	0.6
Running, cutting, and pulling casing, tubes, or rods.....	13	3	0.2	1.4	0.2	0.3	1.2	2.5	0.4	2.7	0.3	0.2	2.0
Cleaning out, bailing out, or swabbing wells.....	12	5	0.3	2.4	0.3	0.6	2.1	4.1	1.0	4.6	0.3	(NA)	(NA)
Pumping wells, hut not operating leases.....	5	1	0.1	0.5	0.1	0.2	0.5	3.8	0.1	1.4	2.5	(NA)	(NA)
North California.....	20	-	0.1	0.9	0.1	0.2	0.7	2.5	0.7	3.0	0.2	(NA)	(NA)
Well surveying and well logging....	6	-	0.1	0.4	(Z)	0.1	0.3	1.2	0.3	1.4	0.7	(NA)	(NA)
East Central California.....	96	29	1.6	11.2	1.5	2.9	9.4	26.2	6.2	28.2	4.2		
Well surveying and well logging..	8	1	0.1	0.9	0.1	0.2	0.7	3.4	0.9	4.0	0.3	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	8	3	0.2	1.8	0.2	0.4	1.6	3.2	0.8	3.6	0.3	(NA)	(NA)
Central Coastal California.....													
South California.....	104	27	1.8	14.0	1.5	3.2	10.9	23.5	7.4	29.0	1.9	(NA)	(NA)
Well surveying and well logging..	10	3	0.1	0.8	0.1	0.2	0.6	2.4	0.5	2.7	0.1	(NA)	(NA)
Running, cutting, and pulling casing, tubes, or rods.....	6	1	0.1	0.7	0.1	0.1	0.6	1.4	0.2	1.5	0.2	(NA)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified.

¹Includes offshore.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963

(See appendix, Explanation of Terms)

Code	State, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	PENNSYLVANIA													
1381	McKean: Drilling oil and gas wells...	30	2	0.1	0.7	0.1	0.3	0.7	1.3	0.7	1.8	0.2	0.1	0.6
	OHIO													
138	Licking: Oil and gas field services.....	20	1	0.1	0.7	0.1	0.2	0.6	2.1	1.1	2.8	0.3	(NA)	(NA)
138	Morrow: Oil and gas field services.....	28	1	0.1	0.9	0.1	0.3	0.8	1.6	0.9	2.2	0.3	(NA)	(NA)
138	Muskingum: Oil and gas field services.....	15	1	0.1	0.7	0.1	0.3	0.7	1.8	0.8	2.2	0.4	(NA)	(NA)
138	Perry: Oil and gas field services.....	20	1	0.1	0.6	0.1	0.2	0.6	1.2	0.6	1.6	0.2	(NA)	(NA)
1381	Drilling oil and gas wells...	14	1	0.1	0.5	0.1	0.2	0.5	1.1	0.5	1.4	0.2	(NA)	(NA)
138	Portage: Oil and gas field services.....	6	1	0.1	0.6	0.1	0.2	0.5	0.4	1.3	1.6	0.2	(NA)	(NA)
138	Stark: Oil and gas field services.....	14	2	0.2	0.8	0.1	0.2	0.7	1.6	1.0	2.3	0.3	(NA)	(NA)
1381	Drilling oil and gas wells...	4	2	0.1	0.5	0.1	0.1	0.4	1.1	0.8	1.7	0.3	(NA)	(NA)
138	Wayne: Oil and gas field services.....	17	2	0.2	0.9	0.1	0.3	0.9	2.5	1.3	3.4	0.3	(NA)	(NA)
	INDIANA													
138	Posey: Oil and gas field services.....	15	1	0.1	0.5	0.1	0.2	0.4	0.8	0.3	0.9	0.1	(NA)	(NA)
138	Vanderburgh: Oil and gas field services.....	20	4	0.2	1.3	0.1	0.3	0.7	0.8	0.4	1.0	0.2	0.6	4.6
1381	Drilling oil and gas wells...	12	3	0.1	0.7	0.1	0.2	0.6	0.8	0.3	0.9	0.2	0.4	3.1
	ILLINOIS													
138	Clay: Oil and gas field services.....	32	3	0.2	1.5	0.2	0.5	1.3	3.6	2.0	5.0	0.6	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	20	3	0.2	1.2	0.1	0.3	1.0	2.9	1.6	4.0	0.5	(NA)	(NA)
138	Fayette: Oil and gas field services.....	18	3	0.2	1.1	0.2	0.4	1.0	1.7	0.6	2.1	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	9	3	0.1	0.6	0.1	0.2	0.5	0.7	0.1	0.7	0.1	(NA)	(NA)
138	Lawrence: Oil and gas field services.....	21	1	0.1	0.4	0.1	0.2	0.4	0.7	0.3	0.8	0.2	0.1	0.7
138	Marion: Oil and gas field services.....	21	2	0.1	0.7	0.1	0.2	0.5	1.0	0.3	1.2	0.1	(NA)	(NA)
138	Richland: Oil and gas field services.....	33	3	0.2	1.1	0.2	0.4	0.9	2.2	0.6	2.5	0.2	(NA)	(NA)
138	Wabash: Oil and gas field services.....	34	3	0.2	1.0	0.2	0.3	0.8	2.1	0.8	2.6	0.2	(NA)	(NA)
138	Wayne: Oil and gas field services.....	31	1	0.2	1.0	0.2	0.4	0.9	1.7	0.6	2.0	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	19	1	0.1	0.8	0.1	0.3	0.7	1.2	0.5	1.4	0.2	(NA)	(NA)
138	White: Oil and gas field services.....	46	3	0.3	1.8	0.3	0.6	1.6	3.2	1.1	3.9	0.4	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	29	2	0.3	1.4	0.2	0.4	1.2	2.6	0.9	3.2	0.3	(NA)	(NA)
	MICHIGAN													
138	Calhoun: Oil and gas field services.....	14	2	0.1	0.9	0.1	0.3	0.8	2.3	0.8	3.0	0.1	0.1	1.3
	Hillsdale:													

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employ-ees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
NORTH DAKOTA														
138	Burke: Oil and gas field services.....	10	1	0.1	0.7	0.1	0.2	0.6	1.0	0.5	1.4	0.1	0.2	1.8
1389	Williams: Oil and gas field services, n.e.C.....	18	5	0.2	1.1	0.2	0.4	1.0	1.5	0.8	2.1	0.1	(NA)	(NA)
NEBRASKA														
138	Kimball: Oil and gas field services.....	29	4	0.2	1.5	0.2	0.5	1.3	3.2	1.4	3.9	0.7	(NA)	(NA)
1389	Oil and gas field services, n.e.C.....	24	4	0.2	1.2	0.2	0.4	1.1	2.6	1.0	2.9	0.7	(NA)	(NA)
KANSAS														
138	Barber: Oil and gas field services.....	17	2	0.1	0.6	0.1	0.2	0.5	0.7	0.4	1.1	0.1	(NA)	(NA)
138	Barton: Oil and gas field services.....	96	11	0.8	4.5	0.7	1.5	3.8	7.9	3.2	10.2	0.8	0.5	5.8
1381	Drilling oil and gas wells...	27	3	0.2	1.1	0.2	0.4	1.0	2.0	1.1	2.8	0.2	0.1	1.7
1389	Oil and gas field services, n.e.C.....	65	8	0.6	3.4	0.5	1.1	2.8	5.9	2.0	7.4	0.6	0.4	4.0
138	Ellis: Oil and gas field services.....	42	4	0.2	1.5	0.2	0.5	1.3	3.9	2.0	5.5	0.5	(NA)	(NA)
1389	Oil and gas field services, n.e.C.....	24	2	0.1	0.9	0.1	0.3	0.8	2.2	0.9	2.9	0.2	0.2	2.3
138	Greenwood: Oil and gas field services.....	25	1	0.1	0.6	0.1	0.2	0.5	1.3	0.5	1.7	0.1	(NA)	(NA)
138	Rice: Oil and gas field services.....	31	1	0.1	0.6	0.1	0.2	0.5	1.1	0.4	1.4	0.1	(NA)	(NA)
138	Rooks: Oil and gas field services.....	34	1	0.1	0.7	0.1	0.2	0.6	1.1	0.4	1.3	0.2	(NA)	(NA)
138	Russell: Oil and gas field services.....	46	1	0.2	1.0	0.2	0.4	0.9	2.0	0.8	2.6	0.1	(NA)	(NA)
1389	Oil and gas field services, n.e.C.....	34	1	0.2	0.8	0.1	0.3	0.8	1.3	0.3	1.5	0.1	0.2	1.7
138	Sedgwick: Oil and gas field services.....	54	6	0.4	2.2	0.3	0.6	1.7	3.2	0.7	3.6	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	27	4	0.2	1.3	0.2	0.4	1.1	1.5	0.6	1.9	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.C.....	15	2	0.1	0.6	0.1	0.2	0.4	1.0	0.1	1.0	0.1	(NA)	(NA)
138	Seward: Oil and gas field services.....	23	2	0.1	0.9	0.1	0.2	0.8	2.3	1.0	3.0	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.C.....	19	1	0.1	0.8	0.1	0.2	0.7	1.9	0.8	2.5	0.2	(NA)	(NA)
WEST VIRGINIA														
138	Kanawha: Oil and gas field services.....	22	5	0.3	1.9	0.2	0.5	1.6	3.8	1.5	4.8	0.5	0.1	1.4
1381	Drilling oil and gas wells...	11	2	0.2	1.3	0.2	0.3	1.1	2.0	0.6	2.3	0.2	(NA)	(NA)
KENTUCKY														
138	Henderson: Oil and gas field services.....	20	3	0.3	1.6	0.2	0.5	1.3	2.7	1.1	3.5	0.3	0.2	2.8
1389	Oil and gas field services, n.e.C.....	11	3	0.2	1.2	0.2	0.4	1.0	2.1	0.8	2.7	0.1	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	ALABAMA													
138	Mobile: Oil and gas field services.....	10	2	0.1	0.4	0.1	0.2	0.4	0.7	0.2	0.8	0.1	0.3	4.3
	MISSISSIPPI													
	Adams:													
138	Oil and gas field services.....	36	12	0.6	3.7	0.5	1.1	3.1	8.6	4.1	11.1	1.2	(NA)	(NA)
1381	Drilling oil and gas wells...	12	5	0.2	1.6	0.2	0.4	1.4	3.2	1.8	4.5	0.5	0.3	2.3
1389	Oil and gas field services, n.e.c.....	22	7	0.4	2.1	0.3	0.7	1.7	5.5	2.3	6.6	0.7	(NA)	(NA)
	Jones:													
138	Oil and gas field services.....	28	2	0.3	1.6	0.2	0.5	1.3	4.1	0.9	4.7	0.4	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	19	1	0.2	1.0	0.1	0.3	0.7	3.0	0.4	3.3	0.2	(NA)	(NA)
	Marion:													
138	Oil and gas field services.....	12	3	0.1	0.7	0.1	0.3	0.7	1.3	0.5	1.6	0.2	(NA)	(NA)
1381	Drilling oil and gas wells...	9	3	0.1	0.7	0.1	0.2	0.7	1.3	0.5	1.6	0.2	0.1	0.9
	Wayne:													
138	Oil and gas field services.....	15	3	0.1	0.8	0.1	0.3	0.7	1.8	1.2	2.6	0.4	(NA)	(NA)
	ARKANSAS													
	Columbia:													
138	Oil and gas field services.....	18	4	0.2	0.9	0.1	0.3	0.7	1.6	0.9	2.0	0.4	(NA)	(NA)
	Sebastian:													
138	Oil and gas field services.....	14	2	0.1	0.8	0.1	0.3	0.6	1.5	0.6	1.9	0.2	0.1	0.6
	Union:													
138	Oil and gas field services.....	36	4	0.3	1.3	0.3	0.5	1.2	2.9	0.8	3.3	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	11	3	0.1	0.6	0.1	0.2	0.5	1.2	0.4	1.4	0.1	0.1	1.2
1389	Oil and gas field services, n.e.c.....	23	-	0.1	0.6	0.1	0.2	0.5	1.4	0.3	1.3	0.2	(NA)	(NA)
	LOUISIANA													
	Acadia:													
138	Oil and gas field services.....	32	5	0.4	2.9	0.4	0.8	2.4	6.3	2.2	7.9	0.6	(NA)	(NA)
1381	Drilling oil and gas wells...	15	-	0.1	1.0	0.1	0.3	0.9	2.6	1.3	3.7	0.2	0.3	2.8
1389	Oil and gas field services, n.e.c.....	16	4	0.3	1.7	0.2	0.4	1.3	3.2	0.6	3.5	0.3	(NA)	(NA)
	Assumption:													
138	Oil and gas field services....	11	2	0.1	0.6	0.1	0.2	0.6	1.2	0.4	1.5	0.1	(NA)	(NA)
	Bossier:													
1389	Oil and gas field services, n.e.c.....	18	3	0.2	1.5	0.2	0.4	1.4	2.9	0.8	3.4	0.3	(NA)	(NA)
	Caddo:													
138	Oil and gas field services.....	83	16	1.0	6.4	0.8	1.7	4.5	12.2	2.7	13.6	1.2	(NA)	(NA)
1381	Drilling oil and gas wells...	30	7	0.4	2.3	0.3	0.7	1.8	2.5	1.2	3.0	0.7	0.7	7.7
1382	Oil and gas exploration services.....	13	3	0.3	2.1	0.2	0.4	1.1	6.4	0.8	7.0	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	40	6	0.3	2.0	0.3	0.6	1.6	3.3	0.7	3.7	0.3	(NA)	(NA)
	Calcasieu:													
138	Oil and gas field services.....	49	13	0.6	4.3	0.5	1.1	3.4	8.6	4.0	11.2	1.5	0.2	3.5
1381	Drilling oil and gas wells...	19	4	0.2	1.4	0.2	0.4	1.2	2.4	1.4	3.3	0.5	0.2	3.5
1389	Oil and gas field services, n.e.c.....	29	8	0.4	2.7	0.3	0.7	2.0	6.0	2.4	7.6	0.8	(NA)	(NA)
	Claiborne:													
138	Oil and gas field services.....	19	3	0.2	1.1	0.1	0.3	0.9	2.4	1.2	3.4	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	12	2	0.1	0.7	0.1	0.2	0.6	1.6	0.6	2.0	0.1	(NA)	(NA)
	Concordia:													
138	Oil and gas field services.....	30	2	0.3	1.3	0.2	0.5	1.2	3.0	1.4	4.0	0.4	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	23	1	0.2	0.8	0.2	0.3	0.8	2.1	0.5	2.3	0.3	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	LOUISIANA--Continued													
	Iberia:													
138	Oil and gas field services....	55	18	1.1	7.4	0.9	2.1	5.9	11.1	4.6	14.1	1.6	(NA)	(NA)
1381	Drilling oil and gas wells...	24	5	0.5	3.3	0.4	0.9	2.6	3.4	2.3	5.2	0.5	0.2	2.2
1389	Oil and gas field services, n.e.c.....	28	11	0.5	3.9	0.5	1.1	3.0	6.5	1.9	7.6	0.9	(NA)	(NA)
	Jefferson:													
138	Oil and gas field services....	46	16	1.2	9.0	0.9	2.4	7.0	20.5	14.5	28.4	6.6	(NA)	(NA)
1381	Drilling oil and gas wells...	14	4	0.1	1.0	0.1	0.2	0.9	2.2	1.6	2.3	1.5	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	29	10	1.0	7.5	0.8	2.0	5.6	17.7	12.6	25.3	5.0	0.7	4.4
	Jefferson Davis:													
138	Oil and gas field services....	31	8	0.3	2.3	0.3	0.6	1.9	4.6	2.4	6.3	0.7	(NA)	(NA)
1381	Drilling oil and gas wells...	16	4	0.2	1.5	0.2	0.4	1.3	2.5	1.8	3.7	0.7	0.2	1.6
1389	Oil and gas field services, n.e.c.....	13	3	0.1	0.7	0.1	0.2	0.5	1.5	0.3	1.8	(Z)	(NA)	(NA)
	Lafayette:													
138	Oil and gas field services....	85	16	1.0	6.9	0.9	1.8	5.3	14.2	4.8	16.9	2.1	(NA)	(NA)
1381	Drilling oil and gas wells...	21	4	0.2	1.5	0.2	0.4	1.1	3.6	1.5	3.9	1.1	0.1	1.5
1389	Oil and gas field services, n.e.c.....	54	12	0.8	5.2	0.7	1.4	4.0	10.3	3.3	12.7	1.0	0.7	5.7
	Lafourche:													
138	Oil and gas field services....	61	16	0.9	7.0	0.8	2.3	5.9	12.9	4.8	16.7	0.9	(NA)	(NA)
1381	Drilling oil and gas wells...	26	7	0.4	3.5	0.3	1.1	2.9	4.8	2.5	6.7	0.5	0.6	10.2
1382	Oil and gas exploration services.....	7	3	0.2	1.1	0.2	0.5	1.0	2.7	1.1	3.6	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	28	6	0.3	2.5	0.3	0.7	2.0	5.4	1.2	6.4	0.2	0.4	2.8
	Orleans:													
138	Oil and gas field services....	35	7	0.5	4.6	0.2	0.4	1.3	2.8	1.4	4.0	0.3	(NA)	(NA)
1381	Drilling oil and gas wells...	17	2	0.1	1.1	0.1	0.2	0.7	0.8	0.7	1.3	0.2	0.2	2.2
1389	Oil and gas field services, n.e.c.....	11	4	0.3	3.1	0.1	0.2	0.4	0.7	0.2	0.9	(Z)	(NA)	(NA)
	Plaquemines:													
138	Oil and gas field services....	83	28	1.8	12.0	1.6	3.5	10.3	24.7	10.6	32.0	3.3	(NA)	(NA)
1381	Drilling oil and gas wells...	32	15	1.0	6.2	0.9	1.8	5.4	11.9	6.6	16.6	2.0	0.7	10.7
1382	Oil and gas exploration services.....	5	2	0.1	0.1	0.1	0.2	0.5	1.4	0.5	1.5	0.4	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	46	11	0.7	5.2	0.6	1.5	4.4	11.4	3.5	13.9	1.0	(NA)	(NA)
	Pointe Coupee:													
138	Oil and gas field services....	10	5	0.2	1.7	0.1	0.3	1.4	3.2	2.0	4.9	0.3	(NA)	(NA)
1381	Drilling oil and gas wells...	8	5	0.2	1.7	0.1	0.3	1.4	3.1	1.9	4.7	0.3	(NA)	(NA)
	Rapides:													
138	Oil and gas field services....	10	1	0.1	0.5	0.1	0.2	0.5	0.6	0.5	1.1	(Z)	(NA)	(NA)
	St. Charles:													
138	Oil and gas field services....	14	2	0.1	0.7	0.1	0.2	0.6	1.1	0.7	1.6	0.2	(NA)	(NA)
	St. Landry:													
138	Oil and gas field services....	25	6	0.3	1.9	0.3	0.5	1.6	4.4	1.9	5.5	0.8	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	12	5	0.2	1.3	0.2	0.4	1.1	2.9	1.0	3.6	0.3	(NA)	(NA)
	St. Martin:													
138	Oil and gas field services....	41	5	0.4	2.4	0.3	0.7	2.1	5.0	1.8	6.6	0.3	(NA)	(NA)
1381	Drilling oil and gas wells...	25	3	0.2	1.3	0.2	0.4	1.1	2.5	1.3	3.7	0.2	0.1	2.9
1389	Oil and gas field services, n.e.c.....	15	2	0.2	1.1	0.2	0.3	0.9	2.4	0.5	2.9	0.1	(NA)	(NA)
	St. Mary:													
138	Oil and gas field services....	61	14	0.8	5.9	0.6	1.5	4.6	13.1	6.1	17.3	1.9	(NA)	(NA)
1381	Drilling oil and gas wells...	29	7	0.3	2.7	0.3	0.6	2.1	6.2	3.1	8.3	1.0	0.4	4.6
1389	Oil and gas field services, n.e.c.....	29	5	0.4	2.7	0.3	0.8	2.2	6.5	2.8	8.5	0.7	(NA)	(NA)
	Terrebonne:													
138	Oil and gas field services....	82	30	1.8	12.7	1.4	3.3	9.7	29.0	10.1	36.0	3.0	(NA)	(NA)
1381	Drilling oil and gas wells...	27	9	0.5	3.8	0.4	1.1	3.2	8.1	4.2	11.3	1.0	0.6	10.0
1382	Oil and gas exploration services.....	10	2	0.1	0.8	0.1	0.2	0.6	1.6	0.8	2.0	0.5	0.2	1.6
1389	Oil and gas field services, n.e.c.....	45	19	1.2	8.1	0.9	2.0	5.8	19.3	5.1	22.8	1.6	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	States, county and industry	1967											1963	
		County establishment ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	LOUISIANA--Continued													
	Vermilion:													
138	Oil and gas field services.....	49	10	0.6	3.8	0.6	1.2	3.3	7.0	3.7	8.9	1.7	(NA)	(NA)
1381	Drilling oil and gas wells...	24	5	0.4	2.5	0.4	0.8	2.3	4.5	2.8	6.0	1.3	0.4	5.4
1389	Oil and gas field services, n.e.c.....	20	3	0.1	0.8	0.1	0.3	0.6	1.1	0.4	1.5	0.1	(NA)	(NA)
	Offshore:													
138	Oil and gas field services.....	75	52	6.5	52.5	6.0	14.4	45.8	169.5	104.7	224.5	49.7	4.2	87.6
1381	Drilling oil and gas wells...	34	27	4.0	30.8	3.7	8.3	28.0	100.7	66.2	129.0	37.9	3.1	56.3
1382	Oil and gas exploration services.....	9	5	0.4	2.4	0.4	1.4	1.3	7.8	4.1	10.9	1.1	0.3	6.1
1389	Oil and gas field services, n.e.c.....	32	20	2.1	19.3	1.9	4.7	16.5	61.0	34.4	84.6	10.7	0.8	24.2
	OKLAHOMA													
	Blaine:													
1381	Drilling oil and gas wells...	11	2	0.1	0.6	0.1	0.2	0.5	1.6	1.4	2.7	0.3	0.1	0.5
	Canadian:													
138	Oil and gas field services.....	13	2	0.1	0.9	0.1	0.3	0.9	1.4	1.4	2.3	0.5	(NA)	(NA)
1381	Drilling oil and gas wells...	9	2	0.1	0.9	0.1	0.3	0.8	1.3	1.4	2.2	0.5	(Z)	0.2
	Carter:													
138	Oil and gas field services.....	51	4	0.4	1.9	0.3	0.6	1.4	4.3	1.6	5.6	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	14	3	0.2	0.8	0.1	0.3	0.6	2.0	1.0	2.7	0.2	0.3	1.9
1389	Oil and gas field services, n.e.c.....	35	1	0.2	1.0	0.2	0.3	0.8	2.4	0.7	2.9	0.1	0.2	3.1
	Creek:													
138	Oil and gas field services.....	55	7	0.4	2.3	0.4	0.9	2.0	4.3	1.7	5.5	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	14	1	0.1	0.6	0.1	0.3	0.6	1.0	0.4	1.3	0.1	0.2	1.6
1389	Oil and gas field services, n.e.c.....	40	6	0.3	1.5	0.3	0.6	1.3	3.2	1.2	4.0	0.3	(NA)	(NA)
	Custer:													
138	Oil and gas field services.....	18	1	0.1	0.7	0.1	0.2	0.7	1.6	1.3	2.3	0.6	(NA)	(NA)
	Garfield:													
138	Oil and gas field services.....	45	6	0.4	2.5	0.4	0.8	2.0	7.3	3.7	10.1	0.8	(NA)	(NA)
1381	Drilling oil and gas wells...	20	2	0.2	0.8	0.1	0.2	0.6	1.8	1.6	3.1	0.3	0.2	2.0
1389	Oil and gas field services, n.e.c.....	25	4	0.3	1.8	0.2	0.5	1.3	5.5	2.1	7.1	0.5	(NA)	(NA)
	Garvin:													
138	Oil and gas field services.....	49	13	0.7	3.7	0.6	1.3	3.2	7.5	3.3	9.6	1.2	(NA)	(NA)
1381	Drilling oil and gas wells...	16	3	0.2	1.1	0.2	0.4	1.0	2.0	1.1	2.8	0.3	0.4	4.7
1389	Oil and gas field services, n.e.c.....	33	10	0.5	2.6	0.5	0.9	2.2	5.5	2.2	6.8	0.9	0.4	3.7
	Grady:													
138	Oil and gas field services.....	14	1	0.1	0.8	0.1	0.3	0.7	1.6	2.2	3.1	0.8	(NA)	(NA)
	Kingfisher:													
1381	Drilling oil and gas wells...	21	3	0.2	1.4	0.2	0.4	1.4	2.3	1.2	3.0	0.5	0.4	4.7
	Latimer:													
138	Oil and gas field services.....	14	2	0.1	0.9	0.1	0.3	0.7	1.7	1.0	2.5	0.2	(NA)	(NA)
	Lincoln:													
138	Oil and gas field services.....	28	1	0.1	0.5	0.1	0.2	0.5	1.2	0.5	1.5	0.1	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	18	1	0.1	0.3	0.1	0.1	0.3	0.6	0.2	0.7	(Z)	(NA)	(NA)
	Major:													
138	Oil and gas field services.....	34	2	0.1	0.9	0.1	0.2	0.7	1.9	1.1	2.8	0.2	(NA)	(NA)
	Oklahoma:													
138	Oil and gas field services.....	137	28	1.6	9.5	1.4	2.6	7.0	14.7	4.6	16.8	2.4	(NA)	(NA)
1381	Drilling oil and gas wells...	38	9	0.4	2.9	0.3	0.7	1.7	3.9	2.2	4.9	1.3	0.4	3.8
1382	Oil and gas exploration services.....	19	2	0.1	0.7	0.1	0.2	0.6	1.0	0.3	1.0	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	80	17	1.0	5.9	0.9	1.8	4.7	9.8	2.1	10.9	0.9	0.5	3.6

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	States, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	OKLAHOMA--Continued													
	Osage:													
138	Oil and gas field services.....	43	5	0.3	1.4	0.2	0.4	1.2	2.5	1.0	3.2	0.3	(NA)	(NA)
1381	Drilling oil and gas wells...	17	3	0.1	0.7	0.1	0.2	0.6	1.1	0.4	1.4	0.1	0.1	0.8
1389	Oil and gas field services, n.e.c.....	26	2	0.1	0.7	0.1	0.2	0.5	1.4	0.6	1.8	0.2	(NA)	(NA)
	Pontotoc:													
138	Oil and gas field services.....	25	1	0.1	0.4	0.1	0.1	0.4	1.0	0.3	1.1	0.2	(NA)	(NA)
	Pottawantomie:													
138	Oil and gas field services.....	35	2	0.2	0.8	0.2	0.3	0.7	1.4	0.6	1.7	0.2	(NA)	(NA)
	Seminole:													
1381	Drilling oil and gas wells...	14	3	0.1	0.7	0.1	0.2	0.6	1.3	0.5	1.6	0.2	0.2	1.6
1389	Oil and gas field services, n.e.c.....	35	5	0.4	2.2	0.3	0.8	1.8	4.6	2.2	6.2	0.6	(NA)	(NA)
	Stephens:													
138	Oil and gas field services.....	52	10	1.3	10.3	0.3	0.8	1.6	5.2	2.3	6.7	0.8	(NA)	(NA)
1381	Drilling oil and gas wells...	17	4	0.2	1.2	0.2	0.4	0.9	2.4	1.4	3.2	0.6	0.3	2.2
1389	Oil and gas field services, n.e.c.....	35	6	1.1	9.1	0.2	0.4	0.7	2.8	0.9	3.5	0.2	0.7	2.0
	Texas:													
138	Oil and gas field services.....	20	1	0.1	0.6	0.1	0.2	0.5	1.7	1.0	2.3	0.4	(NA)	(NA)
	Tulsa:													
1381	Drilling oil and gas wells...	33	5	0.4	2.7	0.2	0.3	0.9	1.6	0.5	2.0	0.1	0.4	1.8
1382	Oil and gas exploration services.....	17	5	0.3	2.2	0.1	0.3	0.8	1.5	0.2	1.6	0.1	0.2	1.0
	Woodward:													
1381	Drilling oil and gas wells...	15	2	0.1	1.0	0.1	0.3	0.8	1.8	0.8	2.4	0.2	0.2	1.7
	TEXAS													
	Andrews:													
138	Oil and gas field services.....	74	16	0.8	4.8	0.7	1.6	4.0	11.2	4.9	14.6	1.5	(NA)	(NA)
1381	Drilling oil and gas wells.....	19	3	0.1	1.0	0.1	0.3	0.9	2.1	2.0	3.5	0.6	0.5	6.1
1389	Oil and gas field services, n.e.c.....	52	11	0.6	3.5	0.5	1.2	2.9	8.4	2.5	10.3	0.6	0.6	7.0
	Atascosa:													
1389	Oil and gas field services, n.e.c.....	14	2	0.2	0.9	0.1	0.3	0.7	1.3	0.5	1.6	0.2	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	States, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	TEXAS--Continued													
138	Brooks: Oil and gas field services.....	22	1	0.1	0.9	0.1	0.2	0.8	1.4	0.8	2.0	0.3	(NA)	(NA)
138	Caldwell: Oil and gas field services.....	34	5	0.3	1.9	0.3	0.6	1.6	4.7	2.4	6.6	0.5	(NA)	(NA)
1381	Drilling oil and gas wells...	10	2	0.1	0.9	0.1	0.3	0.8	1.3	0.7	1.9	0.1	0.2	2.0
1389	Oil and gas field services, n.e.c.....	24	3	0.2	1.0	0.1	0.3	0.8	3.4	1.7	4.8	0.3	(NA)	(NA)
138	Calhoun: Oil and gas field services.....	17	1	0.1	0.6	0.1	0.2	0.5	1.2	0.4	1.6	(Z)	(NA)	(NA)
138	Chambers: Oil and gas field services.....	36	5	0.3	1.5	0.2	0.4	1.2	3.2	1.7	4.4	0.6	(NA)	(NA)
1381	Drilling oil and gas wells...	14	3	0.2	0.7	0.1	0.2	0.6	1.5	1.0	2.3	0.2	(NA)	(NA)
138	Clay: Oil and gas field services.....	22	1	0.1	0.7	0.1	0.2	0.6	0.8	0.6	1.3	0.1	(NA)	(NA)
138	Cooke: Oil and gas field services.....	26	4	0.2	1.3	0.2	0.5	1.1	3.2	1.1	3.9	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	15	3	0.2	1.0	0.2	0.3	0.9	2.4	0.8	3.0	0.2	(NA)	(NA)
138	Crane: Oil and gas field services.....	43	6	0.3	1.6	0.3	0.5	1.2	3.9	1.5	4.8	0.6	(NA)	(NA)
1381	Drilling oil and gas wells...	18	3	0.1	0.6	0.1	0.2	0.5	1.4	0.7	1.9	0.2	0.3	3.1
1389	Oil and gas field services, n.e.c.....	23	3	0.2	1.0	0.1	0.3	0.7	2.4	0.7	2.7	0.3	(NA)	(NA)
138	Crockett: Oil and gas field services.....	24	3	0.3	1.8	0.2	0.6	1.6	3.9	2.4	5.6	0.7	(NA)	(NA)
1381	Drilling oil and gas wells...	13	2	0.1	1.1	0.1	0.3	1.0	2.5	1.9	3.9	0.6	0.1	2.3
1389	Oil and gas field services, n.e.c.....	10	1	0.1	0.7	0.1	0.2	0.6	1.2	0.4	1.6	0.1	(NA)	(NA)
138	Dallas: Oil and gas field services.....	53	12	1.0	6.6	0.7	1.4	4.2	5.8	1.5	6.9	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	12	4	0.3	1.5	0.2	0.3	0.8	1.3	0.9	2.2	0.1	0.4	3.8
1382	Oil and gas exploration services.....	24	5	0.3	1.7	0.3	0.6	1.3	2.6	0.4	2.8	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	17	3	0.4	3.4	0.2	0.5	2.1	1.8	0.1	1.9	0.1	0.1	2.0
138	Dawson: Oil and gas field services.....	27	4	0.2	1.0	0.2	0.4	0.8	2.9	0.7	3.4	0.2	(NA)	(NA)
1381	Drilling oil and gas wells...	10	3	0.1	0.6	0.1	0.2	0.5	1.6	0.4	2.0	(Z)	0.2	2.5
1389	Oil and gas field services, n.e.c.....	16	1	0.1	0.4	0.1	0.3	0.3	1.3	0.2	1.3	0.2	(NA)	(NA)
138	Duval: Oil and gas field services.....	41	3	0.2	1.0	0.2	0.3	0.9	3.0	1.1	3.9	0.1	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	30	3	0.2	0.8	0.2	0.3	0.7	2.6	0.9	3.4	0.1	(NA)	(NA)
138	Ector: Oil and gas field services.....	169	48	2.7	15.4	2.3	5.0	12.5	28.5	10.9	35.6	3.7	(NA)	(NA)
1381	Drilling oil and gas wells...	30	8	0.4	2.6	0.4	0.8	2.3	3.4	2.4	4.3	1.4	1.0	8.9
1389	Oil and gas field services, n.e.c.....	132	38	2.2	12.4	1.9	4.0	10.0	24.3	8.1	30.4	2.0	2.7	30.2
138	Fort Bend: Oil and gas field services.....	22	3	0.5	4.0	0.4	0.8	3.0	5.7	3.0	8.2	0.5	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	12	2	0.4	3.7	0.3	0.7	2.7	5.2	2.7	7.4	0.5	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	States, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	TEXAS--Continued													
	Gaines:													
138	Oil and gas field services.....	34	6	0.5	4.0	0.5	1.1	3.5	6.6	3.3	9.3	0.6	(NA)	(NA)
1381	Drilling oil and gas wells...	11	1	0.2	2.3	0.2	0.5	2.0	3.7	2.6	6.0	0.3	0.2	3.3
1389	Oil and gas field services, n.e.c.....	21	4	0.2	1.5	0.2	0.5	1.3	2.6	0.7	3.1	0.2	0.3	3.0
	Galveston:													
138	Oil and gas field services.....	23	3	0.1	1.0	0.1	0.3	0.8	2.2	0.8	2.5	0.5	(NA)	(NA)
	Gray:													
138	Oil and gas field services.....	54	8	0.4	2.7	0.4	0.8	2.0	5.4	1.6	6.4	0.6	(NA)	(NA)
1381	Drilling oil and gas wells...	15	2	0.1	0.8	0.1	0.2	0.7	1.0	0.5	1.4	0.1	0.2	1.3
1389	Oil and gas field services, n.e.c.....	37	6	0.3	1.9	0.2	0.5	1.3	4.4	1.1	5.0	0.5	0.3	2.9
	Grayson:													
138	Oil and gas field services.....	16	2	0.1	0.9	0.1	0.3	0.8	1.5	0.5	1.8	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	10	2	0.1	0.7	0.1	0.3	0.6	1.1	0.3	1.2	0.2	(NA)	(NA)
	Gregg:													
138	Oil and gas field services.....	63	12	0.6	3.6	0.5	1.1	3.1	7.1	3.0	8.3	1.7	(NA)	(NA)
1381	Drilling oil and gas wells...	14	3	0.2	1.1	0.2	0.3	1.0	1.1	0.6	0.8	0.9	0.1	1.1
1389	Oil and gas field services, n.e.c.....	48	9	0.4	2.5	0.4	0.8	2.1	6.0	2.4	7.6	0.8	(NA)	(NA)
	Gaudalupe:													
138	Oil and gas field services.....	21	1	0.1	0.5	0.1	0.2	0.5	0.9	0.4	1.2	0.1	(NA)	(NA)
	Hardin:													
138	Oil and gas field services.....	31	2	0.2	1.1	0.1	0.3	1.0	1.8	0.6	2.2	0.2	(NA)	(NA)
	Harris:													
138	Oil and gas field services.....	209	42	3.0	22.1	2.1	4.7	13.1	24.3	13.8	32.8	5.3	(NA)	(NA)
1381	Drilling oil and gas wells...	48	13	0.7	4.9	0.6	1.3	3.7	4.2	2.0	5.1	1.1	0.8	6.6
1382	Oil and gas exploration services.....	58	8	0.7	4.5	0.6	1.4	3.3	8.5	5.2	11.6	2.1	0.4	2.4
1389	Oil and gas field services, n.e.c.....	103	21	1.6	12.6	0.9	2.1	6.1	11.7	6.5	16.1	2.1	1.9	16.4
	Hemphill:													
138	Oil and gas field services.....	16	1	0.1	0.8	0.1	0.2	0.8	1.6	1.4	2.8	0.3	(NA)	(NA)
	Hidalgo:													
138	Oil and gas field services.....	38	10	0.7	4.5	0.5	0.9	3.1	9.3	2.6	11.0	1.0	(NA)	(NA)
1381	Drilling oil and gas wells...	12	4	0.3	2.0	0.2	0.4	1.5	5.6	1.5	6.5	0.6	0.2	2.3
1389	Oil and gas field services, n.e.c.....	23	6	0.4	2.5	0.2	0.5	1.5	3.6	1.1	4.4	0.3	0.2	2.7
	Hockley:													
138	Oil and gas field services.....	33	8	0.3	1.8	0.3	0.6	1.5	3.8	1.5	5.0	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	24	6	0.2	1.3	0.2	0.5	1.0	3.2	1.1	4.0	0.3	(NA)	(NA)
	Howard:													
138	Oil and gas field services.....	35	4	0.3	2.0	0.3	0.7	1.7	3.9	1.8	5.4	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	25	4	0.3	1.5	0.2	0.5	1.2	3.0	1.0	3.8	0.2	(NA)	(NA)
	Hutchinson:													
1389	Oil and gas field services, n.e.c.....	30	5	0.3	1.6	0.2	0.6	1.5	2.7	0.8	3.3	0.3	0.3	2.5
	Jack:													
1381	Drilling oil and gas wells...	15	2	0.2	0.8	0.1	0.3	0.8	1.4	1.4	2.1	0.7	0.2	2.3
	Jackson:													
1381	Drilling oil and gas wells...	13	2	0.1	0.8	0.1	0.2	0.6	1.9	0.7	2.1	0.5	0.2	1.9

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	TEXAS--Continued													
	Jim Wells:													
138	Oil and gas field services.....	56	10	0.8	4.5	0.7	1.3	3.7	7.4	2.8	9.2	0.9	(NA)	(NA)
1381	Drilling oil and gas wells...	23	5	0.3	1.6	0.3	0.5	1.4	1.9	0.9	2.2	0.6	0.3	2.9
1389	Oil and gas field services, n.e.c.....	33	5	0.5	2.9	0.5	0.9	2.3	5.6	1.9	7.1	0.3	(NA)	(NA)
	Karnes:													
138	Oil and gas field services.....	22	2	0.1	0.5	0.1	0.2	0.3	1.1	0.4	1.4	0.1	(NA)	(NA)
	Klegerg:													
138	Oil and gas field services.....	28	3	0.3	1.3	0.3	0.5	1.1	2.7	1.2	3.4	0.5	(NA)	(NA)
1381	Drilling oil and gas wells...	14	2	0.1	0.7	0.1	0.2	0.6	1.5	0.9	2.1	0.3	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	13	1	0.2	0.5	0.2	0.2	0.4	0.9	0.2	1.1	0.1	(NA)	(NA)
	Liberty:													
138	Oil and gas field services.....	53	15	0.6	4.0	0.5	1.2	3.4	6.8	2.7	8.7	0.8	(NA)	(NA)
1381	Drilling oil and gas wells...	16	7	0.2	1.5	0.2	0.5	1.4	2.8	1.1	3.8	0.1	0.4	4.0
1389	Oil and gas field services, n.e.c.....	35	8	0.4	2.5	0.3	0.7	2.0	4.0	1.5	4.8	0.7	0.2	1.8
	Lipscomb:													
138	Oil and gas field services.....	15	2	0.1	1.0	0.1	0.3	0.9	1.6	1.3	2.8	(Z)	(NA)	(NA)
	Matagorda:													
1381	Drilling oil and gas wells...	14	3	0.1	0.9	0.1	0.2	0.8	2.0	1.5	3.1	0.5	0.2	2.1
1389	Oil and gas field services, n.e.c.....	24	2	0.5	3.0	0.4	0.9	2.0	4.2	1.6	5.4	0.4	0.2	2.0
	Midland:													
1381	Drilling oil and gas wells...	37	8	0.5	3.3	0.4	0.8	2.7	4.8	3.5	5.7	2.6	0.8	9.6
1389	Oil and gas field services, n.e.c.....	69	13	0.7	4.6	0.6	1.2	3.3	5.3	1.9	6.5	0.7	0.4	3.9
	Nueces:													
138	Oil and gas field services.....	108	18	1.3	7.7	1.1	2.2	6.3	10.2	5.4	13.8	1.8	(NA)	(NA)
1381	Drilling oil and gas wells...	35	9	0.6	3.5	0.6	1.0	2.9	4.4	3.2	6.6	1.0	0.4	4.5
1389	Oil and gas field services, n.e.c.....	67	7	0.6	3.9	0.5	1.1	3.2	5.2	2.0	6.5	0.7	0.4	4.7
	Ochiltree:													
1381	Drilling oil and gas wells...	8	3	0.1	0.9	0.1	0.3	0.9	1.4	1.2	2.5	0.1	0.3	3.1
	Pecos:													
138	Oil and gas field services.....	57	10	0.8	5.7	0.7	1.4	5.1	10.4	8.0	16.9	1.4	(NA)	(NA)
1381	Drilling oil and gas wells...	24	5	0.5	3.9	0.4	0.8	3.5	7.1	6.7	12.9	0.9	0.2	3.9
1389	Oil and gas field services, n.e.c.....	26	4	0.3	1.3	0.2	0.4	1.2	2.2	0.8	2.7	0.3	(NA)	(NA)
	Reagan:													
138	Oil and gas field services.....	25	10	0.5	3.2	0.4	1.0	2.7	8.0	6.7	12.8	1.9	(NA)	(NA)
1381	Drilling oil and gas wells...	11	6	0.3	1.9	0.2	0.5	1.7	4.8	5.2	8.5	1.6	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	13	4	0.2	1.3	0.2	0.4	1.0	3.1	1.3	4.1	0.3	0.1	0.7
	Reeves:													
1381	Drilling oil and gas wells...	12	5	0.2	1.2	0.2	0.3	1.1	2.2	2.2	4.0	0.4	0.1	2.5
	Refugio:													
1389	Oil and gas field services, n.e.c.....	18	2	0.1	0.7	0.1	0.3	0.7	1.8	1.1	2.7	0.2	(NA)	(NA)
	Runnels:													
138	Oil and gas field services.....	24	1	0.1	0.8	0.1	0.3	0.6	1.7	0.7	2.3	0.2	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county, and industry	1967											1963	
		County establishments ¹		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	TEXAS--Continued													
	Rusk:													
138	Oil and gas field services.....	24	7	0.3	1.6	0.2	0.5	1.3	3.4	1.7	4.2	0.9	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	14	5	0.2	1.0	0.1	0.3	0.7	1.8	1.0	2.3	0.5	(NA)	(NA)
	San Patricio:													
138	Oil and gas field services.....	36	1	0.3	2.0	0.3	0.6	1.8	3.5	1.9	4.9	0.5	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	19	1	0.3	1.6	0.2	0.5	1.5	2.8	2.4	3.8	0.4	0.2	1.5
	Scurry:													
138	Oil and gas field services.....	53	8	0.5	3.2	0.4	0.9	2.8	6.3	2.4	7.8	0.9	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	38	6	0.4	2.4	0.3	0.7	2.1	4.5	1.5	5.4	0.6	(NA)	(NA)
	Shackelford:													
138	Oil and gas field services.....	30	-	0.1	0.5	0.1	0.2	0.5	0.9	0.4	1.3	0.1	0.1	0.8
	Smith:													
1382	Oil and gas exploration services.....	4	2	0.1	0.9	(Z)	0.1	0.2	0.6		0.6	-	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	24	2	0.2	1.5	0.1	0.3	0.9	2.5	0.8	3.1	0.2	(NA)	(NA)
	Starr:													
138	Oil and gas field services.....	22	2	0.2	1.2	0.2	0.4	1.1	2.1	0.6	2.7	0.1	(NA)	(NA)
1381	Drilling oil and gas wells...	13	1	0.1	0.9	0.1	0.3	0.9	1.7	0.5	2.2	(Z)	0.1	1.1
	Stephens:													
138	Oil and gas field services.....	20	2	0.1	0.6	0.1	0.2	0.5	1.2	0.5	1.6	0.1	0.1	1.1
	Tarrant:													
138	Oil and gas field services.....	5	1	0.2	1.2	0.1	0.1	0.3	0.2	(Z)	0.1	0.1	(NA)	(NA)
	Taylor:													
138	Oil and gas field services.....	65	8	0.5	3.0	0.4	0.9	2.5	5.2	2.3	6.6	1.0	(NA)	(NA)
1381	Drilling oil and gas wells...	21	3	0.2	1.2	0.1	0.3	0.9	1.9	1.2	2.5	0.6	0.3	2.5
1389	Oil and gas field services, n.e.c.....	40	5	0.3	1.8	0.2	0.5	1.5	3.3	1.1	4.0	0.4	0.2	2.8
	Titus:													
138	Oil and gas field services.....	12	1	0.1	0.8	0.1	0.2	0.7	1.0	0.2	0.8	0.4	(NA)	(NA)
1381	Drilling oil and gas wells...	7	1	0.1	0.7	0.1	0.2	0.7	0.3	0.2	0.2	0.3	0.1	0.6
	Tom Green:													
138	Oil and gas field services.....	23	2	0.6	3.7	0.6	1.1	3.2	4.7	3.0	7.5	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	15	2	0.6	3.4	0.5	1.1	2.9	4.2	2.7	6.7	0.1	(NA)	(NA)
	Upton:													
1389	Oil and gas field services, n.e.c.....	12	6	0.3	1.7	0.2	0.5	1.5	3.9	1.7	5.1	0.6	(NA)	(NA)
	Victoria:													
1381	Drilling oil and gas wells...	12	3	0.1	0.9	0.1	0.2	0.7	1.2	0.4	1.3	0.3	0.1	1.5
1389	Oil and gas field services, n.e.c.....	32	7	0.4	1.9	0.3	0.7	1.7	5.0	2.3	6.6	0.7	0.2	2.9
	Ward:													
138	Oil and gas field services.....	71	16	0.8	5.2	0.7	1.5	4.3	12.4	6.4	17.2	1.6	(NA)	(NA)
1381	Drilling oil and gas wells...	23	7	0.3	2.2	0.3	0.7	2.0	4.5	3.5	7.3	0.7	0.2	2.7
1389	Oil and gas field services, n.e.c.....	45	8	0.4	2.5	0.4	0.8	2.0	6.0	2.3	7.8	0.5	(NA)	(NA)
	Wharton:													
138	Oil and gas field services.....	27	2	0.3	1.9	0.2	0.5	1.5	2.6	1.1	3.3	0.4	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	17	2	0.2	1.7	0.2	0.4	1.3	2.3	1.0	2.8	0.4	(NA)	(NA)
	Wichita:													
138	Oil and gas field services.....	137	6	0.8	4.5	0.7	1.4	3.5	7.0	4.1	9.8	1.4	(NA)	(NA)
1381	Drilling oil and gas wells...	55	3	0.4	2.3	0.4	0.7	1.8	3.0	2.6	4.8	0.8	0.2	2.4
1389	Oil and gas field services, n.e.c.....	76	3	0.3	2.1	0.3	0.7	1.7	3.9	1.5	4.8	0.5	0.3	3.2

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

(See appendix, Explanation of terms)

Code	State, county, and industry	1967											1963	
		County establishments ¹		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	TEXAS--Continued													
138	Wilbarger:													
	Oil and gas field services.....	17	2	0.1	0.5	0.1	0.2	0.5	1.1	0.5	1.4	0.2	(NA)	(NA)
138	Winkler:													
	Oil and gas field services.....	47	8	0.4	3.0	0.3	0.8	2.4	5.6	3.6	8.3	0.9	(NA)	(NA)
1381	Drilling oil and gas wells...	19	4	0.2	1.4	0.1	0.4	1.2	1.8	2.2	3.6	0.4	0.2	3.0
1389	Oil and gas field services, n.e.c.....	24	3	0.2	1.2	0.2	0.4	0.9	2.0	0.7	2.5	0.1	0.4	3.9
138	Wise:													
	Oil and gas field services.....	19	1	0.1	0.8	0.1	0.2	0.6	1.3	0.8	1.9	0.2	(NA)	(NA)
138	Wood													
	Oil and gas field services.....	23	5	0.2	1.3	0.2	0.5	1.2	3.1	1.4	4.3	0.2	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	11	4	0.2	1.0	0.2	0.4	0.9	1.8	0.7	2.4	0.1	(NA)	(NA)
1389	Yoakum:													
	Oil and gas field services, n.e.c.....	30	5	0.4	2.1	0.4	0.7	1.8	4.1	1.1	4.7	0.5	(NA)	(NA)
138	Young:													
	Oil and gas field services.....	55	2	0.3	1.5	0.3	0.5	1.1	3.4	1.1	3.8	0.7	(NA)	(NA)
1381	Drilling oil and gas wells...	18	1	0.1	0.6	0.1	0.2	0.5	1.6	0.6	1.7	0.6	0.3	3.1
1389	Oil and gas field services, n.e.c.....	37	1	0.2	0.9	0.2	0.3	0.6	1.8	0.5	2.2	0.1	(NA)	(NA)
138	Offshore:													
	Oil and gas field services.....	28	14	1.0	6.4	0.8	1.9	5.3	22.0	11.5	25.1	8.4	(NA)	(NA)
1381	Drilling oil and gas wells...	9	8	0.5	3.6	0.4	1.0	3.1	12.5	9.6	15.6	6.5	(NA)	(NA)
	MONTANA													
138	Glacier:													
	Oil and gas field services.....	16	1	0.1	0.7	0.1	0.2	0.6	0.8	0.2	1.0	0.1	(NA)	(NA)
1381	Yellowstone:													
	Drilling oil and gas wells...	6	2	0.3	1.5	0.2	0.5	1.3	1.4	3.4	3.5	1.3	0.1	1.1
	WYOMING													
1381	Campbell:													
	Drilling oil and gas wells...	12	6	0.4	2.3	0.3	0.7	2.0	3.5	4.7	7.4	0.8	0.3	3.2
1382	Oil and gas exploration services.....	3	1	0.2	0.4	0.1	0.2	0.3	0.8	(Z)	0.8	(Z)	0.1	1.9
138	Fremont:													
	Oil and gas field services.....	21	3	0.3	1.6	0.2	0.5	1.4	2.9	2.4	5.0	0.2	(NA)	(NA)
1389	Johnson:													
	Oil and gas field services, n.e.c.....	5	2	0.1	0.7	0.1	0.2	0.7	1.5	0.3	1.6	0.2	(NA)	(NA)
1381	Natrona:													
	Drilling oil and gas wells...	24	2	0.2	1.4	0.1	0.3	1.0	1.5	1.2	2.0	0.7	0.2	2.0
1389	Oil and gas field services, n.e.c.....	20	3	0.2	1.2	0.2	0.4	1.1	2.3	0.6	2.6	0.3	(NA)	(NA)
138	Weston:													
	Oil and gas field services.....	23	1	0.1	0.6	0.1	0.2	0.5	1.4	0.6	1.9	0.1	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	State, county, and industry	1967											1963	
		County establishments ¹		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	COLORADO													
1389	Rio Blanco: Oil and gas field services, n.e.c.....	13	4	0.2	0.9	0.1	0.3	0.6	1.6	0.3	1.7	0.1	(NA)	(NA)
	NEW MEXICO													
138	Chaves: Oil and gas field services.....	24	2	0.2	1.0	0.1	0.3	0.9	1.7	1.1	2.6	0.2	(NA)	(NA)
1381	Drilling oil and gas wells	9	2	0.1	0.7	0.1	0.2	0.7	0.9	0.8	1.6	0.1	0.1	1.2
138	Eddy: Oil and gas field services.....	55	5	0.5	2.6	0.4	0.8	2.2	6.6	2.7	8.3	1.0	(NA)	(NA)
1381	Drilling oil and gas wells...	22	1	0.1	0.8	0.1	0.2	0.7	1.7	1.0	2.5	0.2	0.4	4.6
1382	Oil and gas exploration services.....	3	1	0.1	0.8	0.1	0.3	0.6	2.3	0.8	2.5	0.6	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	30	3	0.2	1.1	0.2	0.4	0.9	2.5	1.0	3.3	0.2	0.2	2.9
1381	Lea: Drilling oil and gas wells...	31	10	0.6	4.3	0.6	1.4	4.0	9.3	5.5	13.5	1.3	1.3	15.4
1389	Oil and gas field services, n.e.c.....	110	27	1.6	9.2	1.4	3.0	7.4	20.0	7.3	25.0	2.3	1.4	13.7
1381	Rio Arriba: Drilling oil and gas wells...	6	3	0.1	0.7	0.1	0.2	0.5	1.1	1.1	2.1	0.2	0.1	1.3
138	Roosevelt: Oil and gas field services.....	18	2	0.1	0.8	0.1	0.2	0.8	1.3	0.7	1.9	0.1	(NA)	(NA)
1381	San Juan: Drilling oil and gas wells...	19	7	0.3	2.2	0.3	0.6	2.0	3.2	3.5	6.2	0.5	0.4	4.3
1389	Oil and gas field services, n.e.c.....	41	5	0.4	2.5	0.3	0.7	2.1	6.4	2.5	8.1	0.8	(NA)	(NA)
	CALIFORNIA													
1389	Fresno: Oil and gas field services, n.e.c.....	12	4	0.2	1.3	0.2	0.4	1.1	2.0	0.3	2.2	0.1	(NA)	(NA)
138	Kern: Oil and gas field services.....	124	37	2.2	15.9	2.0	4.0	13.3	33.0	10.5	38.0	5.4	(NA)	(NA)
1381	Drilling oil and gas wells...	26	9	0.7	5.4	0.6	1.3	4.5	9.6	3.7	12.1	1.3	0.8	11.0
1382	Oil and gas exploration services.....	12	2	0.1	0.8	0.1	0.2	0.6	1.1	1.4	2.5	0.1	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	86	26	1.4	9.7	1.3	2.5	8.2	22.2	5.3	23.4	4.1	1.9	11.1

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

(see appendix, Explanation of Terms)

Code	State, county, and industry	1967											1963	
		County establishments ¹		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	CALIFORNIA--Continued													
	Los Angeles:													
138	Oil and gas field services.....	128	40	3.2	25.7	2.3	4.8	16.9	31.7	12.6	38.0	6.3	(NA)	(NA)
1381	Drilling oil and gas wells...	29	11	1.3	10.6	0.9	1.8	6.7	10.8	6.2	12.7	4.3	0.7	8.8
1382	Oil and gas exploration services.....	12	4	0.3	2.5	0.1	0.1	0.4	1.0	0.2	1.1	0.1	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	87	25	1.6	12.6	1.3	2.9	9.8	19.8	6.2	24.2	1.8	1.1	10.5
	Orange:													
1381	Drilling oil and gas wells...	8	3	0.1	1.1	0.1	0.2	0.8	1.6	0.7	2.3	0.1	0.2	1.9
	Santa Barbara:													
1389	Oil and gas field services, n.e.c.....	16	6	0.3	2.2	0.2	0.5	2.0	3.2	1.1	4.0	0.3	(NA)	(NA)
	Solano:													
1381	Drilling oil and gas wells...	5	2	0.1	1.1	0.1	0.2	1.0	2.0	1.1	2.8	0.4	(Z)	0.8
	Ventura:													
1381	Drilling oil and gas wells...	10	3	0.2	1.2	0.1	0.3	1.1	1.8	0.8	2.4	0.2	0.3	3.0
1389	Oil and gas field services, n.e.c.....	25	5	0.4	2.8	0.3	0.6	2.4	4.5	2.7	6.7	0.6	0.3	4.0
	Offshore:													
138	Oil and gas field services.....	26	10	0.8	8.1	0.8	1.9	7.6	22.9	12.3	29.4	5.9	0.3	7.2
1381	Drilling oil and gas wells...	13	7	0.5	5.1	0.5	1.1	4.7	15.5	9.8	20.6	4.7	(NA)	(NA)

Note: The sums of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (NA) Not available. (Z) Represents less than one half of the unit of measure specified.

¹The figures for number of "county establishments" represent the number of operations in separate counties as indicated by the county figures included in reports received. The latter reports usually represented all operations of each company in the United States. The figures for number of establishments shown elsewhere represent the number of such reports received.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	1381.--Drilling Oil and Gas Wells Industry										
	United States		Northeast Region		East North Central Division				West North Central Division		
	Total	Offshore	Total	Pennsyl- vania	Total	Ohio	Illinois	Michigan	Total	North Dakota	Kansas
Establishments, total.....number..	2,347	66	115	96	301	135	99	30	165	9	129
With 1 to 19 employees.....do....	1,766	17	108	89	267	127	83	24	144	6	113
With 20 to 99 employees.....do....	505	29	7	7	32	7	16	5	21	3	16
With 100 or more employees.....do....	76	20	-	-	2	1	-	1	-	-	-
All employees (average for the year).....1,000..	42.9	5.7	0.6	0.5	2.8	1.1	1.0	0.4	1.8	0.2	1.4
Payroll (all employees), total for year..million dollars.	294.7	48.5	3.7	3.3	15.4	6.2	5.1	2.7	10.8	1.8	7.9
Production, development, and exploration workers:											
Average for the year.....do....	38.7	5.2	0.5	0.5	2.7	1.1	0.9	0.4	1.6	0.2	1.3
March.....do....	37.1	5.2	0.5	0.4	2.4	1.0	0.9	0.4	1.4	0.2	1.1
May.....do....	38.6	5.5	0.5	0.5	2.7	1.1	1.0	0.4	1.7	0.2	1.3
August.....do....	39.9	5.7	0.6	0.5	2.8	1.2	1.0	0.4	1.7	0.2	1.3
November.....do....	39.6	5.0	0.5	0.4	2.7	1.2	0.9	0.4	1.7	0.2	1.3
Man-hours, total.....millions..	81.4	12.1	1.2	1.1	5.0	2.0	1.8	0.7	3.3	0.5	2.6
Wages.....million dollars.	255.2	44.1	3.3	2.9	13.8	5.8	4.6	2.4	9.7	1.7	7.2
Supplemental labor cost not included in payroll....do....	31.2	6.8	0.3	0.2	1.0	0.4	0.3	0.2	0.9	0.2	0.6
Legally required expenditures, including Social Security contributions.....do....	25.1	5.1	0.2	0.2	0.9	0.3	0.3	0.2	0.8	0.1	0.5
Payments for voluntary programs.....do....	6.1	1.7	0.1	(Z)	0.1	0.1	(Z)	(Z)	0.1	(Z)	0.1
Cost of supplies, total.....do....	406.7	101.4	6.9	6.5	15.8	7.6	4.6	2.4	13.8	2.3	9.9
Supplies used, minerals received for preparation, and purchased machinery.....do....	322.3	83.5	3.5	3.2	12.4	6.1	3.6	1.8	9.9	1.7	7.0
Cost of resales.....do....	0.9	-	(Z)	(Z)	0.1	0.1	(Z)	(Z)	0.1	(Z)	(Z)
Purchased fuels consumed.....do....	31.1	2.4	0.3	0.3	1.7	0.6	0.6	0.3	1.5	0.3	1.1
Electric energy:											
Quantity purchased.....million kw.-hrs.....	50.6	(Z)	0.7	0.7	1.5	0.7	0.3	0.3	11.1	0.3	9.7
Cost.....million dollars..	0.8	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	(Z)	0.1
Generated less sold.....million kw.-hrs..	473.2	1.4	(Z)	(Z)	(Z)	(Z)	-	-	0.4	0.1	0.3
Contract work.....million dollars..	51.6	15.5	3.0	3.0	1.6	0.8	0.4	0.2	2.1	0.2	1.6
Value of shipments and receipts (including resales), total.....do....	893.7	194.6	14.6	13.5	43.0	18.5	13.4	7.7	33.0	5.2	24.5
Value of resales.....do....	1.0	-	(Z)	(Z)	0.1	0.1	(Z)	(Z)	(Z)	-	(Z)
Value added in mining.....million dollars..	627.4	151.5	9.2	8.4	31.6	12.7	10.5	5.7	22.3	3.4	16.7
Capital expenditures (except land and mineral rights), total.....do....	140.4	58.3	1.5	1.4	4.4	1.8	1.8	0.4	3.0	0.6	2.1
Mineral development and exploration.....do....	26.5	(D)	0.1	0.1	0.9	0.2	0.4	(Z)	0.4	(Z)	0.4
New structures and additions.....do....	10.0	(D)	(Z)	(Z)	0.2	0.1	0.2	(Z)	0.1	-	0.1
New machinery and equipment.....do....	86.7	30.7	1.3	1.2	2.5	1.1	1.0	0.2	1.7	0.3	1.2
Used plant and equipment.....do....	17.2	2.3	0.1	0.1	0.8	0.4	0.2	0.2	0.8	0.2	0.5
Mineral development and exploration expenditures, total.....do....	53.2	(D)	0.1	0.1	1.4	0.4	0.6	0.1	2.1	(Z)	2.0
Capitalized.....do....	26.5	(D)	0.1	0.1	0.9	0.2	0.4	(Z)	0.4	(Z)	0.4
Expensed.....do....	26.7	2.3	(Z)	(Z)	0.5	0.2	0.2	0.1	1.7	(Z)	1.6
Man-hours worked by production, development, and exploration workers, total.....do....	81.4	12.1	1.2	1.1	5.0	2.0	1.8	0.7	3.3	0.5	2.6
Operating and maintaining wells.....do....	2.3	0.5	(Z)	(Z)	0.1	(Z)	(Z)	(Z)	0.2	(Z)	0.2
Drilling wells and rig building.....do....	72.9	10.7	1.2	1.0	4.6	1.9	1.6	0.7	2.8	0.4	2.3
Exploration work (excluding drilling wells).....do....	0.8	0.5	(Z)	(Z)	0.1	(Z)	0.1	-	0.1	-	(Z)
Other work.....do....	5.4	0.4	(Z)	(Z)	0.2	0.1	0.1	(Z)	0.2	0.1	0.1

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1381.--Drilling oil and gas wells industry--Continued										
	South Atlantic Division		East South Central Division			West South Central Division					
	Division	West Virginia	Division	Kentucky	Mississippi	Total	Offshore	Louisiana			
								Total	North	South	Offshore
Establishments, total.....number..	110	102	168	122	33	1,149	43	209	64	111	34
With 1 to 19 employees.....do....	98	91	144	118	14	774	8	107	49	51	7
With 20 to 99 employees.....do....	12	11	23	4	18	319	21	76	15	46	15
With 100 or more employees.....do....	-	-	1	-	1	54	14	26	-	14	12
All employees (average for year).....1,000..	0.8	0.7	1.5	0.5	1.0	27.7	4.5	10.1	0.9	5.2	4.0
Payroll (all employees), total for year..million dollars..	4.3	4.0	9.5	2.5	6.3	186.6	34.4	75.1	5.8	38.5	30.8
Production, development, and exploration workers:											
Average for the year.....1,000..	0.7	0.6	1.4	0.5	0.8	25.0	4.1	9.2	0.8	4.7	3.7
March.....do....	0.6	0.6	1.3	0.4	0.7	24.8	4.2	9.2	0.8	4.8	3.8
May.....do....	0.6	0.6	1.4	0.5	0.8	25.3	4.3	9.2	0.8	4.7	3.8
August.....do....	0.7	0.7	1.5	0.5	0.9	25.1	4.2	9.1	0.9	4.7	3.7
November.....do....	0.7	0.7	1.6	0.5	0.9	24.9	3.8	9.0	0.8	4.8	3.5
Man-hours, total.....millions..	1.4	1.3	2.8	0.9	1.8	53.0	9.3	20.6	1.7	10.5	8.3
Wages.....million dollars..	3.7	3.5	8.4	2.3	5.5	161.5	31.1	66.2	4.8	33.3	28.0
Supplemental labor cost not included in payroll....do....	0.3	0.3	0.8	0.2	0.6	20.5	5.0	8.5	0.6	4.2	4.4
Legally required expenditures, including Social Security contributions.....do....	0.3	0.2	0.7	0.2	0.5	16.4	3.7	6.5	0.5	3.3	3.2
Payments for voluntary programs.....do....	(Z)	(Z)	0.1	(Z)	0.1	4.1	1.3	2.0	0.1	0.9	1.2
Cost of supplies, total.....do....	4.3	3.9	14.0	2.7	10.0	263.3	75.8	115.9	7.6	42.1	66.2
Supplies used, minerals received for preparation, and purchased machinery.....do....	3.5	3.2	10.2	1.9	7.3	211.3	63.0	92.4	5.1	33.0	54.4
Cost of resales.....do....	(Z)	(Z)	0.1	(Z)	(Z)	0.5	-	0.2	(Z)	0.1	-
Purchased fuels consumed.....do....	0.4	0.3	1.3	0.3	0.8	19.7	2.1	6.7	0.6	4.1	1.9
Electric energy:											
Quantity purchased.....million kw.-hrs..	0.6	0.6	2.0	1.3	0.7	29.0	(Z)	1.7	0.6	1.0	(Z)
Cost.....million dollars..	(Z)	(Z)	(Z)	(Z)	(Z)	0.4	(Z)	(Z)	(Z)	(Z)	(Z)
Generated less sold.....million kw.-hrs..	(Z)	(Z)	10.4	-	10.4	367.4	130.8	172.6	0.6	67.7	104.3
Contract work.....million dollars..	0.4	0.3	2.4	0.4	1.8	31.4	10.7	16.6	1.9	4.8	10.0
Value of shipments and receipts (including resales), total.....do....	10.9	10.2	31.1	7.4	21.5	576.8	144.6	247.8	16.5	102.3	129.0
Value of resales.....do....	(Z)	(Z)	0.1	(Z)	0.1	0.5	-	0.2	(Z)	0.1	-
Value added in mining.....million dollars..	8.3	7.9	20.8	5.6	13.8	409.1	113.2	184.3	10.8	72.7	100.7
Capital expenditures (except land and mineral rights), total.....do....	1.6	1.5	3.7	1.0	2.3	95.6	44.4	52.4	2.0	12.5	37.9
Mineral development and exploration.....do....	0.2	0.2	0.4	0.3	(Z)	23.3	(D)	(D)	0.2	0.4	(D)
New structures and additions.....do....	(Z)	(Z)	0.1	(Z)	(Z)	8.8	(D)	(D)	0.1	0.2	(D)
New machinery and equipment.....do....	1.1	1.1	2.5	0.4	1.9	54.0	19.1	24.1	1.1	10.5	12.2
Used plant and equipment.....do....	0.3	0.2	0.7	0.2	0.3	9.5	0.1	2.2	0.6	1.4	0.1
Mineral development and exploration expenditures, total.....do....	0.3	0.2	0.9	0.6	0.2	39.1	(D)	(D)	0.5	2.6	(D)
Capitalized.....do....	0.2	0.2	0.4	0.3	(Z)	23.3	(D)	(D)	0.2	0.4	(D)
Expensed.....do....	0.1	(Z)	0.5	0.3	0.2	15.8	0.7	2.8	0.3	2.2	0.3
Man-hours worked by production, development, and exploration workers, total.....do....											
Operating and maintaining wells.....do....	(Z)	(Z)	0.2	(Z)	0.1	1.6	0.5	0.8	0.1	0.6	0.5
Drilling wells and rig building.....do....	1.3	1.2	2.5	0.8	1.6	47.0	8.5	18.1	1.5	8.8	7.5
Exploration work (excluding drilling wells).....do....	(Z)	(Z)	(Z)	-	(Z)	0.2	-	(Z)	(Z)	-	-
Other work.....do....	(Z)	(Z)	0.1	0.1	0.1	4.2	0.3	1.7	0.2	1.2	0.3

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item		1381.--Drilling oil and gas wells industry--Continued									
		West South Central Division--Continued									
		Oklahoma	Texas								
Total	Texas Gulf Coast A		Texas Gulf Coast B	South Texas	South-west Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas	
Establishments, total.....number..	(D)	699	86	43	69	44	112	58	33	49	125
With 1 to 19 employees.....do....	(D)	504	54	30	46	39	96	46	25	37	78
With 20 to 99 employees.....do....	(D)	174	28	13	21	4	15	12	6	12	40
With 100 employees or more.....do....	(D)	21	4	-	2	1	1	-	2	-	7
All employees (average for the year).....1,000..	(D)	13.1	2.0	0.7	1.7	0.8	1.2	0.6	0.6	0.8	3.2
Payroll (all employees), total for year...million dollars..	(D)	85.1	12.4	4.6	10.2	4.6	6.4	3.0	3.4	5.5	23.0
Production, development, and exploration workers:											
Average for the year.....1,000..	(D)	11.9	1.8	0.6	1.6	0.8	1.1	0.5	0.5	0.8	2.9
March.....do....	(D)	11.7	1.8	0.6	1.6	0.8	1.1	0.5	0.5	0.7	2.7
May.....do....	(D)	12.0	1.8	0.6	1.5	0.8	1.1	0.5	0.5	0.7	2.9
August.....do....	(D)	12.0	1.7	0.6	1.6	0.8	1.0	0.5	0.5	0.8	2.9
November.....do....	(D)	12.0	1.8	0.6	1.6	0.8	1.0	0.4	0.5	0.7	3.0
Man-hours, total.....millions..	(D)	24.5	3.5	1.3	2.9	1.6	2.2	0.9	1.0	1.6	6.1
Wages.....million dollars..	(D)	74.4	10.5	3.8	8.8	4.5	5.6	2.5	2.6	4.9	20.3
Supplemental labor cost not included in payroll.....do....	(D)	8.8	1.0	0.3	1.0	0.4	0.6	0.4	0.4	0.8	2.5
Legally required expenditures, including Social Security contributions.....do....	(D)	7.4	0.8	0.3	0.9	0.3	0.5	0.3	0.3	0.7	2.1
Payments for voluntary programs.....do....	(D)	1.4	0.2	(Z)	0.1	0.1	0.1	0.1	(Z)	0.1	0.4
Cost of supplies, total.....do....	(D)	115.9	12.9	4.0	10.0	5.3	9.2	3.7	4.5	6.7	34.8
Supplies used, minerals received for preparation, and purchased machinery.....do....	(D)	93.7	9.4	3.0	7.8	3.8	7.2	2.7	3.8	5.3	28.5
Cost of resales.....do....	(D)	0.2	0.1	(Z)	(Z)	(Z)	0.1	(Z)	(Z)	(Z)	0.1
Purchased fuels consumed.....do....	(D)	10.3	1.2	0.4	1.1	0.6	1.0	0.6	0.4	0.6	3.2
Electric energy:											
Quantity purchased.....million kw.-hrs..	(D)	22.8	1.7	1.1	0.9	0.6	1.0	0.8	0.3	1.3	11.5
Cost.....million dollars..	(D)	0.3	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1
Generated less sold.....million kw.-hrs..	(D)	192.6	5.5	0.5	0.6	(Z)	0.2	0.1	(Z)	0.6	144.0
Contract work.....do....	(D)	11.4	2.2	0.6	1.0	0.9	0.9	0.4	0.3	0.8	2.8
Value of shipments and receipts (including resales), total.....do....	(D)	255.0	32.8	12.7	26.9	11.7	18.8	8.8	12.0	15.3	70.8
Value of resales.....do....	(D)	0.3	0.1	(Z)	(Z)	1	0.1	(Z)	(Z)	(Z)	0.1
Value added in mining.....million dollars..	(D)	173.9	22.8	10.2	19.8	7.2	12.9	6.5	8.9	11.2	44.3
Capital expenditures (except land and mineral rights), total.....do....											
Mineral development and exploration.....do....	(D)	34.8	3.0	1.5	2.9	0.8	3.2	1.3	1.3	2.5	8.4
New structures and additions.....do....	(D)	4.1	0.5	0.5	0.6	0.2	0.9	0.4	0.1	0.1	0.6
New machinery and equipment.....do....	(D)	1.1	0.1	(Z)	0.1	(Z)	0.1	(Z)	(Z)	0.1	0.7
Used plant and equipment.....do....	(D)	24.7	1.9	0.9	1.6	0.4	1.6	0.5	1.0	1.4	6.3
Mineral development and exploration expenditures, total.....do....	(D)	4.9	0.4	0.1	0.7	0.1	0.6	0.5	0.2	1.0	0.7
Capitalized.....do....	(D)	10.7	0.9	0.9	1.3	0.3	1.4	1.2	0.7	0.3	2.6
Expensed.....do....	(D)	4.1	0.5	0.5	0.6	0.2	0.9	0.4	0.1	0.1	0.6
Man-hours worked by production, development, and exploration workers, total.....do....	(D)	6.6	0.4	0.4	0.7	0.1	0.5	0.8	0.6	0.2	2.0
Operating and maintaining wells.....do....	(D)	24.5	3.5	1.3	2.9	1.6	2.2	0.9	1.0	1.6	6.1
Drilling wells and rig building.....do....	(D)	0.6	0.2	(Z)	0.1	0.1	0.1	(Z)	(Z)	0.1	0.1
Exploration work (excluding drilling wells).....do....	(D)	21.7	2.9	0.7	2.5	1.5	2.0	0.8	1.0	1.1	5.7
Other work.....do....	(D)	0.2	-	-	(Z)	-	0.1	(Z)	-	-	0.1
	(D)	2.0	0.4	0.6	0.3	(Z)	(Z)	(Z)	-	0.4	0.2

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967--Continued

Item	1381.--Drilling oil and gas wells industry--Continued									
	West South Central division--Continued			Mountain division						
	Texas--Continued			Total	Montana	Wyoming	Colorado	New Mexico		
	West Texas B	Texas Panhandle	Offshore Texas					Total	West	East
Establishments, total.....number..	35	36	9	221	36	52	40	70	23	47
With 1 to 19 employees.....do....	24	28	1	158	27	38	33	43	15	27
With 20 to 99 employees.....do....	10	7	6	56	7	11	7	25	7	18
With 100 employees or more.....do....	1	1	2	7	2	3	-	2	1	1
All employees (average for the year).....1,000..	0.6	0.5	0.5	3.9	0.6	1.1	0.5	1.4	0.5	0.9
Payroll (all employees), total for year..million dollars..	4.4	3.9	3.6	27.9	4.2	7.8	3.9	9.5	3.3	6.3
Production, development, and exploration workers:										
Average for the year.....1,000..	0.6	0.5	0.4	3.6	0.6	1.0	0.4	1.3	0.4	0.8
March.....do....	0.6	0.5	0.4	3.1	0.5	0.9	0.4	1.2	0.3	0.8
May.....do....	0.5	0.5	0.5	3.2	0.5	0.9	0.4	1.2	0.4	0.8
August.....do....	0.6	0.5	0.5	3.8	0.6	1.1	0.5	1.4	0.5	0.9
November.....do....	0.5	0.6	0.4	4.0	0.6	1.2	0.4	1.4	0.5	0.9
Man-hours, total.....millions..	1.3	1.1	1.0	7.6	1.2	2.2	0.8	2.8	0.9	1.9
Wages.....million dollars..	4.0	3.7	3.1	25.0	3.9	6.9	3.2	8.6	2.8	5.8
Supplemental labor cost not included in payroll.....do....	0.7	0.3	0.6	2.8	0.5	0.9	0.4	0.8	0.2	0.5
Legally required expenditures, including Social Security contributions.....do....	0.6	0.2	0.5	2.2	0.4	0.6	0.3	0.7	0.2	0.4
Payments for voluntary programs.....do....	0.1	0.1	0.1	0.6	0.1	0.3	0.1	0.1	(Z)	0.1
Cost of supplies, total.....do....	9.6	5.8	9.6	45.1	9.9	13.2	5.1	13.8	5.2	8.6
Supplies used, minerals received for preparation, and purchased machinery.....do....	8.3	4.8	8.6	35.9	7.5	10.7	3.9	11.4	4.5	6.9
Cost of resales.....do....	-	(Z)	-	0.1	(Z)	(Z)	(Z)	0.1	(Z)	0.1
Purchased fuels consumed.....do....	0.7	0.5	0.2	4.6	0.9	1.5	0.6	1.3	0.5	0.8
Electric energy:										
Quantity purchased.....million kw.-hrs..	3.7	0.1	-	4.1	1.0	0.1	1.5	1.5	0.1	1.5
Cost.....million dollars..	(Z)	(Z)	-	0.1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Generated less sold.....million kw.-hrs..	14.3	0.2	26.5	72.3	0.3	2.2	2.3	64.0	3.8	60.2
Contract work.....million dollars..	0.6	0.5	0.8	4.3	1.5	1.0	0.5	1.1	0.2	0.9
Value of shipments and receipts (including resales), total.....do....	17.6	11.9	15.6	88.7	15.3	24.3	10.5	30.1	9.0	21.2
Value of resales.....do....	-	(Z)	-	0.1	(Z)	(Z)	0.1	(Z)	(Z)	(Z)
Value added in mining.....million dollars..	10.8	6.8	12.5	53.1	7.5	13.7	6.7	18.9	4.7	14.3
Capital expenditures (except land and mineral rights), total.....do....	2.7	0.6	6.5	9.4	2.2	2.6	1.3	2.6	0.8	1.7
Mineral development and exploration.....do....	(Z)	(Z)	-	1.0	0.7	(Z)	0.1	0.2	(Z)	0.1
New structures and additions.....do....	(Z)	(Z)	-	0.3	(Z)	(Z)	0.1	0.1	(Z)	(Z)
New machinery and equipment.....do....	2.2	0.5	6.5	6.3	1.1	2.0	0.8	1.9	0.7	1.3
Used plant and equipment.....do....	0.5	0.1	(Z)	1.8	0.3	0.6	0.3	0.4	0.1	0.3
Mineral development and exploration expenditures, total.....do....	0.4	0.1	0.4	4.4	2.4	0.3	0.8	0.9	0.2	0.7
Capitalized.....do....	(Z)	(Z)	-	1.0	0.7	(Z)	0.1	0.2	(Z)	0.1
Expensed.....do....	0.4	(Z)	0.4	3.4	1.7	0.3	0.7	0.7	0.2	0.6
Man-hours worked by production, development, and exploration workers, total.....do....	1.3	1.1	1.0	7.6	1.2	2.2	0.8	2.8	0.9	1.9
Operating and maintaining wells.....do....	(Z)	(Z)	-	0.3	(Z)	0.2	(Z)	(Z)	-	0.1
Drilling wells and rig building.....do....	1.2	1.0	1.0	7.1	1.1	2.0	0.8	2.7	0.8	1.8
Exploration work (excluding drilling wells).....do....	-	-	-	(Z)	(Z)	-	-	-	-	-
Other work.....do....	0.1	0.1	-	0.2	(Z)	(Z)	(Z)	0.1	0.1	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1381.—Drilling oil and gas wells industry—Continued						1382.—Oil and gas exploration services industry			
	Pacific Division						United States		West South Central Division	
	Total	Offshore	California				Total	Offshore	Total	Offshore
			Total	East Central California	South California	Offshore California				
Establishments, total.....number..	120	23	100	30	34	13	636	27	325	(D)
With 1 to 19 employees.....do....	73	9	64	20	21	6	537	14	257	(D)
With 20 to 99 employees.....do....	35	8	28	9	8	5	78	7	52	(D)
With 100 employees or more.....do....	12	6	8	1	5	2	21	6	16	(D)
All employees (average for the year).....1,000..	3.9	1.2	3.0	0.7	1.4	0.5	8.4	1.1	5.6	(D)
Payroll (all employees), total for year..million dollars..	36.6	14.1	25.7	6.0	11.7	5.1	53.1	7.9	35.3	(D)
Production, development, and exploration workers:										
Average for the year.....1,000..	3.3	1.1	2.5	0.7	1.0	0.5	6.6	1.0	4.5	(D)
March.....do....	2.9	1.0	2.4	0.7	1.0	0.5	6.8	1.0	4.6	(D)
May.....do....	3.1	1.2	2.5	0.6	1.0	0.6	6.6	1.0	4.4	(D)
August.....do....	3.5	1.5	2.6	0.7	1.0	0.6	6.6	1.0	4.4	(D)
November.....do....	3.4	1.2	2.7	0.6	1.1	0.5	6.4	1.0	4.3	(D)
Man-hours, total.....millions..	7.2	2.8	5.2	1.4	2.0	1.1	15.9	2.9	11.1	(D)
Wages.....million dollars..	29.8	13.0	19.8	5.0	7.5	4.7	39.4	6.2	25.5	(D)
Supplemental labor cost not included in payroll....do....	4.6	1.8	3.4	0.7	1.6	0.7	3.8	0.6	2.6	(D)
Legally required expenditures, including Social Security contributions.....do....	3.6	1.4	2.7	0.5	1.3	0.6	2.6	0.3	1.9	(D)
Payments for voluntary program.....do....	1.0	0.4	0.7	0.2	0.3	0.1	1.2	0.3	0.7	(D)
Cost of supplies, total.....do....	43.6	25.6	25.7	4.5	8.6	9.8	45.5	8.7	31.3	(D)
Supplies used, minerals received for preparation, and purchased machinery.....do....	35.7	20.5	21.0	3.5	7.6	7.5	34.2	6.2	23.1	(D)
Cost of resales.....do....	(Z)	-	(Z)	(Z)	(Z)	-	3.8	1.3	3.4	(D)
Purchased fuels consumed.....do....	1.6	0.3	1.3	0.6	0.4	0.1	2.6	0.5	1.7	(D)
Electric energy:										
Quantity purchased.....million kw.-hrs..	1.7	-	1.5	0.2	1.3	-	5.3	0.4	3.8	(D)
Cost.....million dollars..	(Z)	-	(Z)	(Z)	(Z)	-	0.1	(Z)	0.1	(D)
Generated less sold.....million kw.-hrs..	22.6	13.5	15.8	2.8	4.9	7.2	-	-	-	(D)
Contract work.....million dollars..	6.3	4.8	3.4	0.4	0.6	2.2	4.8	0.7	3.0	(D)
Value of shipments and receipts (including resales), total.....do....	95.5	50.0	61.8	14.4	19.4	20.6	152.0	28.0	103.9	(D)
Value of resales.....do....	0.1	-	0.1	(Z)	(Z)	-	4.4	1.0	3.6	(D)
Value added in mining.....do....	72.9	38.3	47.6	11.2	15.3	15.5	126.4	23.4	86.7	(D)
Capital expenditures (except land and mineral rights), total.....do....	21.1	13.9	11.4	1.3	4.4	4.7	20.0	4.1	14.2	(D)
Mineral development and exploration.....do....	0.1	(D)	0.1	(Z)	(Z)	(Z)	0.3	-	0.1	(D)
New structures and additions.....do....	0.3	(D)	0.2	(Z)	0.1	0.1	0.2	(Z)	0.2	(D)
New machinery and equipment.....do....	17.4	11.6	7.9	0.8	4.1	2.4	19.1	3.8	13.7	(D)
Used plant and equipment.....do....	3.3	2.2	3.1	0.5	0.2	2.2	0.3	0.2	0.2	(D)
Mineral development and exploration expenditures, total.....do....	4.8	(D)	3.2	1.2	1.9	(Z)	1.9	(Z)	0.9	(D)
Capitalized.....do....	0.1	(D)	0.1	(Z)	(Z)	(Z)	0.3	-	0.1	(D)
Expensed.....do....	4.7	1.6	3.1	1.2	1.8	-	1.6	(Z)	0.8	(D)
Man-hours worked by production, development, and exploration workers, total.....millions..	7.2	2.8	5.2	1.4	2.0	1.1	15.9	2.9	11.1	(D)
Operating and maintaining wells.....do....	(Z)	-	(Z)	(Z)	(Z)	-	0.1	-	0.1	(D)
Drilling wells and rig building.....do....	6.4	2.2	4.9	1.4	1.7	1.0	0.4	-	(Z)	(D)
Exploration work (excluding drilling wells).....do....	0.5	0.5	-	-	-	-	14.7	2.9	10.7	(D)
Other Work.....do....	0.3	0.1	0.3	(Z)	0.2	0.1	0.7	(Z)	0.3	(D)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967--Continued

Item	1382.--Oil and Gas Exploration Services Industry--Continued									
	West South Central Division--Continued								Mountain Division	
	Louisiana				Texas				Total	New Mexico
	Total	North Louisiana	South Louisiana	Offshore Louisiana	Total	Texas Gulf Coast A	East Texas A	West Texas A		
Establishments, total.....number..	65	18	38	9	205	65	30	38	117	19
With 1 to 19 employees.....do....	47	15	28	4	165	53	25	28	110	17
With 20 to 99 employees.....do....	10	1	6	3	33	10	4	8	5	1
With 100 or more employees.....do....	8	2	4	2	7	2	1	2	2	1
All employees (average for the year).....1,000..	1.9	0.4	1.1	0.4	3.1	1.1	0.4	0.7	0.9	0.3
Payroll (all employees), total for year..million dollars..	10.9	2.2	6.3	2.4	20.0	6.5	1.8	5.1	5.0	1.8
Production, development, and exploration workers:										
Average for the year.....1,000..	1.6	0.2	1.0	0.4	2.5	0.9	0.3	0.6	0.7	0.3
March.....do....	1.8	0.2	1.1	0.4	2.4	0.9	0.3	0.5	0.7	0.3
May.....do....	1.5	0.2	0.9	0.4	2.5	0.9	0.3	0.5	0.7	0.3
August.....do....	1.5	0.2	0.9	0.4	2.5	0.9	0.3	0.6	0.8	0.3
November.....do....	1.4	0.2	0.9	0.3	2.5	0.9	0.3	0.6	0.7	0.3
Man-hours, total.....millions..	4.3	0.4	2.4	1.4	5.9	2.0	0.6	1.4	1.6	0.6
Wages.....million dollars..	8.1	1.2	5.5	1.3	14.5	5.0	1.4	3.8	4.3	1.5
Supplemental labor cost not included in payroll.....do....	0.9	0.2	0.5	0.2	1.6	0.6	0.1	0.5	0.4	0.2
Legally required expenditures, including Social Security contributions.....do....	0.7	0.2	0.4	0.1	1.1	0.4	0.1	0.4	0.3	0.1
Payments for voluntary programs.....do....	0.2	(Z)	0.1	0.1	0.5	0.2	(Z)	0.1	0.1	0.1
Cost of supplies, total.....do....	11.5	1.1	6.2	4.1	17.5	6.7	0.6	5.5	4.6	2.1
Supplies used, minerals received for preparation, and purchased machinery.....do....	6.9	1.0	3.8	2.1	14.4	5.0	0.5	4.9	3.9	1.9
Cost of resales.....do....	2.9	(Z)	1.6	1.3	0.5	0.5	(Z)	(Z)	(Z)	-
Purchased fuels consumed.....do....	0.5	(Z)	0.2	0.2	1.0	0.2	(Z)	0.4	0.3	0.1
Electric energy:										
Quantity purchased.....million kw.-hrs..	0.6	-	0.6	0.1	2.7	2.1	0.1	0.3	0.4	0.1
Cost.....million dollars..	(Z)	-	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Generated less sold.....million kw.-hrs..	-	-	-	-	-	-	-	-	-	-
Contract work.....million dollars..	1.1	(Z)	0.7	0.4	1.5	1.0	0.1	0.2	0.4	0.1
Value of shipments and receipts (including resales), total.....do....	38.2	8.2	19.1	10.9	56.9	17.5	3.7	16.9	16.1	6.2
Value of resales.....do....	2.6	0.1	1.7	0.9	0.9	0.6	0.1	0.1	0.2	(Z)
Value added in mining.....million dollars..	30.5	7.4	15.3	7.8	48.8	13.8	3.3	14.2	13.5	5.0
Capital expenditures (except land and mineral rights), total.....do....	3.8	0.3	2.4	1.1	9.4	3.1	0.2	2.8	2.0	0.9
Mineral development and exploration.....do....	(Z)	(Z)	(Z)	-	0.1	(Z)	(Z)	(Z)	0.1	(Z)
New structures and additions.....do....	(Z)	(Z)	(Z)	(Z)	0.2	0.1	(Z)	(Z)	(Z)	(Z)
New machinery and equipment.....do....	3.7	0.3	2.4	1.0	9.0	2.9	0.2	2.7	1.9	0.9
Used plant and equipment.....do....	(Z)	(Z)	(Z)	(Z)	0.1	-	(Z)	0.1	0.1	(Z)
Mineral development and exploration expenditures, total.....do....	0.1	(Z)	(Z)	-	0.6	0.1	(Z)	0.1	0.4	(Z)
Capitalized.....do....	(Z)	(Z)	(Z)	-	0.1	(Z)	(Z)	(Z)	0.1	(Z)
Expensed.....do....	0.1	(Z)	(Z)	-	0.5	(Z)	(Z)	0.1	0.3	(Z)
Man-hours worked by production, development and exploration worker, total.....man-hours..	4.3	0.4	2.4	1.4	5.9	2.0	0.6	1.4	1.6	0.6
Operating and maintaining wells.....do....	-	-	-	-	(Z)	-	-	-	-	-
Drilling wells and rig building.....do....	-	-	-	-	(Z)	(Z)	-	-	0.3	0.3
Exploration.....do....	4.3	0.4	2.4	1.4	5.7	1.8	0.6	1.3	1.2	0.3
Other work.....do....	(Z)	-	(Z)	-	0.2	0.2	-	0.1	0.1	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1382.—Oil and gas exploration services industry—Continued		1389.—Oil and gas field services, n.e.c., industry						
	Pacific Division		United States		Northeast Region		East North Central Division		
	Total	California	Total	Offshore	Total	Pennsylvania	Total	Ohio	Illinois
Establishments, total.....number..	56	44	3,895	61	72	58	241	69	(D)
With 1 to 19 employees.....do....	41	36	3,144	35	69	56	208	64	(D)
With 20 to 99 employees.....do....	12	5	682	22	2	2	32	5	(D)
With 100 or more employees.....do....	3	3	69	4	1	-	1	-	(D)
All employees (average for year).....1,000..	1.0	0.7	54.8	2.7	0.5	0.3	2.0	0.4	(D)
Payroll (all employees), total for year..million dollars...	8.0	5.8	358.7	26.4	4.0	2.1	11.9	2.2	(D)
Production, development, and exploration workers:									
Average for the year.....1,000..	0.7	0.4	45.3	2.3	0.6	0.3	1.7	0.3	(D)
March.....do....	0.7	0.4	45.4	2.3	0.3	0.3	1.7	0.3	(D)
May.....do....	0.7	0.4	45.4	2.3	0.3	0.3	1.8	0.3	(D)
August.....do....	0.7	0.4	46.1	2.3	0.3	0.3	1.8	0.3	(D)
November.....do....	0.6	0.4	44.9	2.3	0.3	0.3	1.7	0.3	(D)
Man-hours, total.....millions..	1.6	1.0	98.2	5.7	0.7	0.7	3.8	0.7	(D)
Wages.....million dollars..	5.6	3.4	274.4	22.4	2.0	1.8	9.3	1.8	(D)
Supplemental labor cost not included in payroll.....do....	0.5	0.2	35.0	3.4	0.3	0.2	1.1	0.2	(D)
Legally required expenditures, including Social Security contributions.....do....	0.3	0.1	20.7	1.7	0.2	0.1	0.7	0.1	(D)
Payments for voluntary programs.....do....	0.2	0.1	14.3	1.7	0.1	0.1	0.4	0.1	(D)
Cost of supplies, total.....do....	5.6	4.0	288.8	47.8	2.0	1.9	11.4	4.1	(D)
Supplies used, minerals received for preparation, and purchased machinery.....do....	4.5	3.0	226.7	32.4	1.7	1.6	9.7	3.7	(D)
Cost of resales.....do....	0.3	0.3	13.6	4.4	(Z)	(Z)	0.3	0.1	(D)
Purchased fuels consumed.....do....	0.2	0.1	24.6	1.8	0.2	0.2	1.1	0.3	(D)
Electric energy:									
Quantity purchased.....million kw.-hrs..	0.7	0.6	79.4	2.4	0.5	0.5	5.2	1.3	(D)
Cost.....million dollars..	(Z)	(Z)	1.8	0.1	(Z)	(Z)	0.1	(Z)	(D)
Generated less sold.....million kw. hrs..	-	-	5.1	2.5	(Z)	(Z)	(Z)	-	(D)
Contract work.....million dollars..	0.6	0.6	22.1	9.1	0.1	(Z)	0.3	(Z)	(D)
Value of shipments and receipts (including resales), total.....do....	19.3	11.2	971.0	127.2	7.6	7.1	35.9	10.1	(D)
Value of resales.....do....	0.3	0.3	24.9	4.6	0.1	0.1	1.2	0.2	(D)
Value added in mining.....do....	15.7	8.5	770.4	94.6	6.2	5.7	27.5	7.0	(D)
Capital expenditures (except land and mineral rights), total.....do....	2.1	1.3	88.2	15.3	0.6	0.6	3.0	0.9	(D)
Mineral development and exploration.....do....	(Z)	(Z)	2.1	(Z)	(Z)	(Z)	0.1	0.1	(D)
New structures and additions.....do....	(Z)	(Z)	2.9	0.3	(Z)	(Z)	0.1	(Z)	(D)
New machinery and equipment.....do....	2.0	1.3	76.2	14.9	0.5	0.5	2.7	0.8	(D)
Used plant and equipment.....do....	(Z)	(Z)	7.0	0.1	(Z)	(Z)	0.1	(Z)	(D)
Mineral development and exploration expenditures, total.....do....	0.1	0.1	8.7	(Z)	(Z)	(Z)	0.2	0.1	(D)
Capitalized.....do....	(Z)	(Z)	2.1	(Z)	(Z)	(Z)	0.1	0.1	(D)
Expensed.....do....	0.1	0.1	6.6	(Z)	(Z)	(Z)	0.2	-	(D)
Man-hours worked by production, development, and exploration workers, total.....millions..	1.6	1.0	98.2	5.7	0.7	0.7	3.8	0.7	(D)
Operating and maintaining wells.....do....	-	-	5.5	0.2	(Z)	(Z)	0.4	(Z)	(D)
Drilling wells and rig building.....do....	-	-	0.9	0.1	(Z)	(Z)	0.1	-	(D)
Exploration.....do....	1.5	0.9	1.2	-	(Z)	(Z)	0.1	-	(D)
Other work.....do....	0.1	0.1	90.7	5.4	0.7	0.6	3.2	0.7	(D)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1389.—Oil and gas field services, n.e.c., industry—Continued									
	West North Central Division			South Atlantic Division		East South Central Division		West South Central Division		
	Total	North Dakota	Kansas	Total	West Virginia	Total	Mississippi	Total	Louisiana	
									Total	North Louisiana
Establishments, total.....number..	337	(D)	267	64	55	122	72	2,307	382	123
With 1 to 19 employees.....do....	296	(D)	241	60	51	102	60	1,814	265	105
With 20 to 99 employees.....do....	38	(D)	24	4	4	20	12	440	97	17
With 100 employees or more.....do....	3	(D)	2	-	-	-	-	53	20	1
All employees (average for the year).....1,000..	2.8	(D)	2.0	0.4	0.3	1.3	0.8	37.9	10.4	1.2
Payroll (all employees), total for year..million dollars..	16.1	(D)	11.5	2.3	2.2	7.2	4.8	245.3	76.6	7.3
Production, development, and exploration workers:										
Average for the year.....1,000..	2.5	(D)	1.8	0.3	0.3	1.1	0.7	30.7	8.7	1.1
March.....do....	2.5	(D)	1.8	0.3	0.3	1.1	0.7	30.8	8.6	1.1
May.....do....	2.6	(D)	1.8	0.3	0.3	1.2	0.7	30.6	8.5	1.1
August.....do....	2.6	(D)	1.8	0.3	0.3	1.2	0.7	30.9	9.0	1.1
November.....do....	2.5	(D)	1.7	0.3	0.3	1.1	0.6	30.6	8.8	1.0
Man-hours, total.....millions..	5.3	(D)	3.9	0.7	0.6	2.3	1.5	67.0	20.1	2.3
Wages.....million dollars..	13.8	(D)	9.7	1.8	1.7	5.9	3.9	182.4	60.6	6.1
Supplemental labor cost not included in payroll.....do....	1.5	(D)	1.0	0.2	0.2	0.7	0.5	23.6	8.8	0.7
Legally required expenditures, including Social Security contributions.....do....	0.9	(D)	0.6	0.1	0.1	0.4	0.3	13.5	4.8	0.5
Payments for voluntary program.....do....	0.6	(D)	0.4	0.1	0.1	0.3	0.2	10.1	4.0	0.2
Cost of supplies, total.....do....	13.0	(D)	8.8	2.7	6.3	4.8	192.9	77.9	4.6	
Supplies used, minerals received for preparation, and purchased machinery.....do....	10.0	(D)	6.7	2.4	2.3	5.8	4.6	153.3	60.3	3.9
Cost of resales.....do....	0.5	(D)	0.5	(Z)	(Z)	0.1	(Z)	11.6	7.7	0.1
Purchased fuels consumed.....do....	1.8	(D)	1.2	0.2	0.2	0.6	0.5	15.6	4.1	0.4
Electric energy:										
Quantity purchased.....million kw.-hrs..	3.4	(D)	2.5	0.2	0.2	1.3	1.2	61.9	21.8	14.5
Cost.....million dollars..	0.1	(D)	0.1	(Z)	(Z)	(Z)	(Z)	1.2	0.3	(Z)
Generated less sold.....million kw.-hrs..	0.2	(D)	0.2	-	-	-	-	4.3	4.2	(Z)
Contract work.....million dollars..	0.5	(D)	0.4	(Z)	(Z)	0.3	0.2	11.1	5.5	0.2
Value of shipments and receipts (including resales), total.....do....	45.2	(D)	32.3	8.4	8.0	22.7	16.9	635.1	236.6	18.9
Value of resales.....do....	1.6	(D)	1.4	0.2	0.2	0.3	0.1	18.7	9.5	0.3
Value added in mining.....do....	35.6	(D)	25.8	6.3	6.0	18.4	13.7	498.4	183.5	15.9
Capital expenditures (except land and mineral rights), total.....do....	3.4	(D)	2.2	0.6	0.6	2.0	1.7	56.2	24.9	1.6
Mineral development and exploration.....do....	0.3	(D)	0.1	(Z)	(Z)	(Z)	(Z)	1.0	0.2	(Z)
New structures and additions.....do....	0.1	(D)	(Z)	(Z)	(Z)	(Z)	(Z)	2.0	0.7	(Z)
New machinery and equipment.....do....	2.8	(D)	1.9	0.6	0.5	1.9	1.6	49.6	23.3	1.3
Used plant and equipment.....do....	0.2	(D)	0.2	(Z)	(Z)	0.1	0.1	3.6	0.8	0.3
Mineral development and exploration expenditures, total.....do....	0.6	(D)	0.2	-	-	0.1	(Z)	6.9	0.3	0.1
Capitalized.....do....	0.3	(D)	0.1	-	-	(Z)	(Z)	1.0	0.2	(Z)
Expensed.....do....	0.4	(D)	0.1	-	-	(Z)	(Z)	5.9	0.1	0.1
Man-hours worked by production, development, and exploration workers, total.....millions..	5.3	(D)	3.9	0.7	0.6	2.3	1.5	67.0	20.1	2.3
Operating and maintaining wells.....do....	0.2	(D)	0.2	-	-	0.1	(Z)	2.9	0.6	0.2
Drilling wells and rig building.....do....	0.1	(D)	(Z)	(Z)	(Z)	(Z)	-	0.4	0.1	0.1
Exploration work (excluding drilling wells).....do....	0.1	(D)	(Z)	(Z)	(Z)	(Z)	(Z)	0.8	0.1	(Z)
Other work.....do....	4.9	(D)	3.7	0.7	0.6	2.2	1.5	62.9	19.3	2.0

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	1389.--Oil and gas field services, n.e.c.								
	West South Central Division-Continued								
	Louisiana		Oklahoma	Texas					
	South Louisiana	Offshore		State	Texas Gulf Coast A	Texas Gulf Coast B	South Texas	Southwest Texas	North Central Texas A
Establishments, total.....number..	227	32	417	1,463	200	71	139	60	174
With 1 to 19 employees.....do....	148	12	346	1,164	149	54	117	52	156
With 20 to 99 employees.....do....	63	17	63	274	43	16	18	8	18
With 100 employees or more.....do....	16	3	8	25	8	1	4	-	-
All employees (average for the year).....1,000..	7.0	2.1	5.9	21.2	4.0	1.0	2.4	0.5	1.3
Payroll (all employees), total for year..million dollars..	49.9	19.3	37.3	129.6	29.8	4.6	13.6	2.7	7.5
Production, development, and exploration workers:									
Average for the year.....1,000..	5.8	1.9	4.1	17.6	2.9	0.9	2.0	0.4	1.2
March.....do....	5.7	1.7	4.1	17.9	3.0	0.9	2.1	0.5	1.2
May.....do....	5.8	1.7	4.1	17.7	2.9	0.9	2.0	0.4	1.2
August.....do....	6.0	2.0	4.1	17.6	2.7	0.9	2.0	0.4	1.2
November.....do....	5.7	2.0	4.0	17.6	2.9	0.9	2.1	0.4	1.2
Man-hours, total.....millions..	13.1	4.7	8.6	37.7	6.5	1.8	3.9	0.9	2.5
Wages.....million dollars..	38.0	16.5	21.1	99.2	19.4	4.0	10.7	2.2	6.2
Supplemental labor cost not included in payroll....do....	5.4	2.6	2.2	12.4	2.5	0.8	1.7	0.3	0.7
Legally required expenditures, including Social Security contributions.....do....	3.2	1.1	1.5	7.1	1.3	0.5	0.8	0.2	0.4
Payments for voluntary program.....do....	2.2	1.5	0.7	5.3	1.2	0.3	0.9	0.1	0.3
Cost of supplies, total.....do....	39.0	34.4	20.3	93.1	19.1	4.5	11.3	2.8	5.3
Supplies used, minerals received for preparation, and purchased machinery.....do....	30.4	26.0	15.7	76.1	16.0	3.8	9.0	2.3	4.5
Cost of resales.....do....	3.4	4.3	1.1	2.6	1.0	0.1	0.4	0.1	0.1
Purchased fuels consumed.....do....	2.4	1.3	2.4	9.0	1.2	0.3	0.8	0.4	0.5
Electric energy:									
Quantity purchased.....million kw.-hrs..	5.0	2.3	3.1	36.7	2.4	0.7	0.8	0.4	1.3
Cost.....million dollars..	0.2	0.1	0.1	0.8	0.1	(Z)	(Z)	(Z)	(Z)
Generated less sold.....million kw.-hrs..	1.7	2.5	(Z)	0.1	0.1	-	-	-	-
Contract work.....million dollars..	2.7	2.6	1.0	4.6	0.7	0.2	1.1	(Z)	0.1
Value of shipments and receipts (including resales), total.....do....	133.1	84.6	77.7	315.1	56.2	14.7	31.3	8.8	19.8
Value of resales.....do....	4.7	4.5	2.5	6.6	1.5	0.3	1.0	0.2	0.4
Value added in mining.....do....	106.7	61.0	63.4	246.7	42.7	11.5	22.1	6.6	16.1
Capital expenditures (except land and mineral rights), total.....do....									
Mineral development and exploration.....do....	0.1	(Z)	0.1	0.7	(Z)	0.1	0.1	(Z)	0.1
New structures and additions.....do....	0.5	0.2	0.2	1.1	0.1	0.1	(Z)	(Z)	(Z)
New machinery and equipment.....do....	11.5	10.5	4.9	21.0	5.0	1.0	1.9	0.5	1.3
Used plant and equipment.....do....	0.5	(Z)	0.8	2.0	0.3	0.1	0.1	(Z)	0.2
Mineral development and exploration expenditures, total.....do....									
Capitalized.....do....	0.1	(Z)	0.1	0.7	(Z)	0.1	0.1	(Z)	0.1
Expensed.....do....	(Z)	(Z)	1.1	4.7	(Z)	(Z)	(Z)	4.0	(Z)
Man-hours worked by production, development, and exploration workers, total.....millions..	13.1	4.7	8.6	37.7	6.5	1.8	3.9	0.9	2.5
Operating and maintaining wells.....do....	0.2	0.1	0.4	1.9	0.2	(Z)	(Z)	0.1	0.2
Drilling wells and rig building.....do....	(Z)	0.1	0.1	0.2	-	-	(Z)	-	(Z)
Exploration work (excluding drilling wells).....do....	0.1	-	0.1	0.6	0.2	(Z)	0.1	(Z)	0.1
Other work.....do....	12.8	4.5	8.0	35.0	6.1	1.8	3.8	0.8	2.2

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	1389.--Oil and gas field services, n.e.c., industry--Continued								
	West South Central Division--Continued					Mountain Division			
	Texas--Continued					Total	Montana	Wyoming	Colorado
	North Central Texas B	East Texas B	West Texas A	West Texas B	Texas Panhandle				
Establishments, total.....number..	103	107	413	62	89	450	46	116	76
With 1 to 19 employees.....do....	91	84	305	47	71	366	41	96	65
With 20 to 99 employees.....do....	12	21	102	13	18	80	0.5	19	11
With 100 employees or more.....do....	-	2	6	2	-	4	-	1	-
All employees (average for the year).....1,000..	0.8	1.5	6.7	1.3	1.0	5.2	0.4	1.4	0.6
Payroll (all employees), total for year..million dollars..	4.6	8.6	38.5	8.0	6.4	32.6	3.2	9.1	3.6
Production, development, and exploration workers:									
Average for the year.....1,000..	0.7	1.2	5.8	1.2	0.9	4.5	0.4	1.2	0.4
March.....do....	0.7	1.2	5.8	1.1	0.9	4.4	0.4	1.2	0.4
May.....do....	0.8	1.2	5.9	1.1	0.9	4.4	0.4	1.1	0.5
August.....do....	0.7	1.2	5.9	1.2	0.9	4.7	0.4	1.2	0.4
November.....do....	0.7	1.2	5.7	1.2	0.8	4.6	0.4	1.2	0.4
Man-hours, total.....millions..	1.6	2.6	12.5	2.5	2.0	9.5	0.9	2.6	0.9
Wages.....million dollars..	3.9	6.7	31.3	6.8	5.1	26.5	2.6	7.4	2.6
Supplemental labor cost not included in payroll.....do....	0.5	0.9	3.6	0.5	0.5	3.1	0.3	0.9	0.3
Legally required expenditures, including Social Security contributions.....do....	0.3	0.5	2.3	0.3	0.3	1.9	0.2	0.5	0.2
Payments for voluntary program.....do....	0.2	0.4	1.3	0.2	0.2	1.2	0.1	0.4	0.1
Cost of supplies, total.....do....	3.0	6.9	27.8	7.1	4.6	26.7	2.4	7.3	2.3
Supplies used, minerals received for preparation, and purchased machinery.....do....	2.3	5.1	22.3	6.4	3.8	22.3	1.8	6.1	1.7
Cost of resales.....do....	(Z)	0.1	0.7	(Z)	0.1	0.4	(Z)	0.2	(Z)
Purchased fuels consumed.....do....	0.4	0.7	3.6	0.4	0.6	3.1	0.2	0.9	0.3
Electric energy:									
Quantity purchased.....million kw.-hrs..	0.6	6.4	21.8	0.8	1.2	4.8	0.9	1.3	0.6
Cost.....million dollars..	0.1	0.2	0.2	(Z)	(Z)	0.2	(Z)	(Z)	(Z)
Generated less sold.....million kw.-hrs..	-	-	-	-	-	0.1	-	-	(Z)
Contract work.....million dollars..	0.1	0.7	1.0	0.2	0.1	0.9	0.3	0.1	0.2
Value of shipments and receipts (including resales), total.....do....	11.8	23.7	104.6	21.4	18.0	97.2	8.8	27.0	8.9
Value of resales.....do....	0.2	0.3	2.2	0.2	0.2	1.3	0.2	0.4	0.2
Value added in mining.....do....	9.7	19.1	84.0	15.5	15.0	79.4	7.1	22.2	7.7
Capital expenditures (except land and mineral rights), total.....do....	1.0	2.3	7.2	1.2	1.6	8.9	0.6	2.5	1.2
Mineral development and exploration.....do....	(Z)	0.1	0.2	(Z)	(Z)	0.2	(Z)	(Z)	0.1
New structures and additions.....do....	(Z)	0.5	0.2	(Z)	0.1	0.2	(Z)	(Z)	(Z)
New machinery and equipment.....do....	0.8	1.5	6.2	1.1	1.3	7.5	0.5	2.4	1.0
Used plant and equipment.....do....	0.1	0.2	0.6	0.1	0.2	1.0	0.1	0.1	0.1
Mineral development and exploration expenditures, total.....do....	0.1	0.1	0.4	(Z)	0.3	0.3	0.4	(Z)	0.2
Capitalized.....do....	(Z)	0.1	0.2	(Z)	(Z)	0.2	(Z)	(Z)	0.1
Expensed.....do....	0.1	(Z)	0.2	-	0.3	0.1	0.4	-	0.1
Man-hours worked by production, development, and exploration workers, total.....millions..	1.6	2.6	12.5	2.5	2.0	9.7	1.0	2.6	0.9
Operating and maintaining wells.....do....	(Z)	0.2	0.7	0.2	0.2	1.0	(Z)	0.4	0.1
Drilling wells and rig building.....do....	0.1	(Z)	(Z)	-	-	0.1	-	0.1	(Z)
Exploration work (excluding drilling wells).....do....	(Z)	(Z)	0.1	-	0.1	0.1	-	(Z)	(Z)
Other work.....do....	1.5	2.4	11.7	2.3	1.7	8.5	1.0	2.1	0.7

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967--Continued

Item	1389.-Oil and gas field services, n.e.c., Industry--Continued								
	Mountain Division--Con.			Pacific Division					
	New Mexico			Total	Offshore	California			
	Total	West	East			Total	East Central California	Central Coastal California	South California
Establishments, total.....number..	178	44	134	302	16	278	96	42	(D)
With 1 to 19 employees.....do....	140	39	101	229	13	209	67	30	(D)
With 20 to 99 employees.....do....	35	5	30	66	2	63	28	11	(D)
With 100 employees or more.....do....	3	-	3	7	1	6	1	1	(D)
All employees (average for the year).....1,000..	2.4	0.4	2.0	4.8	0.3	4.4	1.6	0.7	(D)
Payroll (all employees), total for year.million dollars..	14.0	2.7	11.3	39.4	6.5	32.4	11.2	5.4	(D)
Production, development, and exploration workers:									
Average for the year.....1,000..	2.1	0.3	1.8	4.1	0.3	3.8	1.5	0.6	(D)
March.....do....	2.0	0.3	1.7	4.2	0.3	3.9	1.4	0.7	(D)
May.....do....	2.1	0.3	1.7	4.2	4.3	3.9	1.5	0.6	(D)
August.....do....	2.2	0.3	1.8	4.4	0.4	3.9	1.6	0.6	(D)
November.....do....	2.1	0.3	1.7	3.9	0.2	3.6	1.4	0.6	(D)
Man-hours, total.....millions..	4.3	0.7	3.6	8.9	0.9	8.0	2.9	1.3	(D)
Wages.....million dollars..	11.4	2.2	9.2	32.6	5.5	26.9	9.4	4.9	(D)
Supplemental labor cost not included in payroll....do....	1.3	0.2	1.1	4.3	0.7	3.6	1.4	0.5	(D)
Legally required expenditures, including Social Security contributions.....do....	0.8	0.1	0.7	3.0	0.6	2.4	1.0	0.3	(D)
Payments for voluntary program.....do....	0.5	0.1	0.4	1.3	0.1	1.2	0.4	0.2	(D)
Cost of supplies, total.....do....	12.3	2.8	9.5	33.9	13.0	19.0	6.2	4.0	(D)
Supplies used, minerals received for preparation, and purchased machinery.....do....	10.4	2.5	8.0	22.1	6.1	14.3	5.1	3.3	(D)
Cost of resales.....do....	0.1	(Z)	0.1	0.8	(Z)	0.7	0.1	0.1	(D)
Purchased fuels consumed.....do....	1.4	0.3	1.1	2.0	0.4	1.5	0.6	0.4	(D)
Electric energy:									
Quantity purchased.....million kw.-hrs....	1.6	0.4	1.2	2.4	0.2	2.2	1.0	0.5	(D)
Cost.....million dollars....	0.1	(Z)	(Z)	0.1	(Z)	0.1	(Z)	(Z)	(D)
Generated less sold.....million kw.-hrs....	-	-	-	0.5	-	0.5	0.5	-	(D)
Contract work.....million dollars....	0.3	(Z)	0.3	8.9	6.6	2.4	0.4	0.2	(D)
Value of shipments and receipts (including resales), total.....do....	43.0	9.3	33.8	118.9	40.9	75.2	28.2	11.9	(D)
Value of resales.....do....	0.5	0.1	0.4	1.5	(Z)	1.2	0.2	0.1	(D)
Value added in mining.....do....	34.3	7.3	27.0	98.5	32.2	63.9	26.2	8.8	(D)
Capital expenditures (except land and mineral rights), total.....do....	3.6	0.9	2.7	13.5	4.5	7.6	4.2	1.0	(D)
Mineral development and exploration.....do....	0.1	(Z)	(Z)	0.4	-	0.4	0.3	0.1	(D)
New structures and additions.....do....	0.2	(Z)	0.1	0.5	0.1	0.1	(Z)	(Z)	(D)
New machinery and equipment.....do....	2.7	0.8	1.9	10.7	4.3	5.3	2.2	0.8	(D)
Used plant and equipment.....do....	0.6	(Z)	0.6	1.8	0.1	1.8	1.6	0.1	(D)
Mineral development and exploration expenditures, total.....do....	0.1	(Z)	0.1	0.4	-	0.4	0.3	0.1	(D)
Capitalized.....do....	0.1	(Z)	(Z)	0.4	-	0.4	0.3	0.1	(D)
Expensed.....do....	(Z)	-	(Z)	(Z)	-	(Z)	(Z)	-	(D)
Man-hours worked by production, development, and exploration workers, total.....millions..	4.3	0.7	3.6	8.9	0.9	8.0	2.9	1.3	(D)
Operating and maintaining wells.....do....	0.4	(Z)	0.4	0.8	(Z)	0.8	0.3	0.2	(D)
Drilling wells and rig building.....do....	(Z)	(Z)	-	0.2	(Z)	0.2	0.2	(Z)	(D)
Exploration work (excluding drilling wells).....do....	0.1	(Z)	0.1	0.1	-	0.1	(Z)	(Z)	(D)
Other work.....do....	3.8	0.7	3.1	7.8	0.9	6.9	2.4	1.1	(D)

Note: The sum of the detail may not add to the totals due to independent rounding.

Standard notes: - Represents zero. (NA) Not available. (Z) Represents less than one half of the unit of measure specified. (D) Withheld to avoid disclosing data for individual companies.

TABLE 3B. Detailed Statistics by Principal Types of Services: 1967

Item	138.-Oil and gas field services industries, total	1381.-Drilling oil and gas wells industry					
		Total ¹	Drilling oil, gas, dry, and service wells			Drilling in, spudding in, and tailing in	Reworking wells
			Total	With well operations	Without well operations		
Establishments, total.....number..	6,878	2,347	2,097	197	1,900	44	172
With 1 to 19 employees.....do....	5,447	1,766	1,617	100	1,517	33	90
With 20 to 99 employees.....do....	1,265	505	410	85	325	9	79
With 100 or more employees.....do....	166	76	70	12	58	2	3
All employees (average for the year).....1,000..	106.1	42.9	37.0	6.8	30.2	1.1	4.2
Payroll (all employees), total for year..million dollars..	706.5	294.7	252.0	44.6	207.4	7.7	28.8
Production, development, and exploration workers:							
Average for the year.....1,000..	90.6	38.7	33.9	6.1	27.8	1.1	3.9
March.....do....	89.3	37.1	32.2	5.8	26.4	1.0	3.9
May.....do....	90.6	38.6	33.6	6.1	27.5	1.0	3.9
August.....do....	92.6	39.9	35.0	6.1	28.9	1.0	3.9
November.....do....	90.9	39.6	34.7	6.2	28.5	1.0	3.8
Man-hours, total.....millions..	195.5	81.4	70.6	13.4	57.2	1.9	9.1
Wages.....million dollars..	569.0	255.2	223.6	39.2	184.4	6.5	25.0
Supplemental labor cost not included in payroll.....do....	70.0	31.2	27.8	4.8	23.0	0.7	3.1
Legally required expenditures, including Social Security contributions.....do....	48.4	25.1	22.2	3.8	18.4	0.5	2.6
Payments for voluntary programs.....do....	21.6	6.1	5.6	1.0	4.6	0.2	0.5
Cost of supplies, etc., total.....do....	741.0	406.7	385.5	89.8	295.6	6.7	14.5
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	583.2	322.3	304.9	67.2	237.7	5.6	11.7
Cost of resales.....do....	18.3	0.9	0.8	0.2	0.6	(2)	0.2
Purchased fuels consumed.....do....	58.3	31.1	28.7	6.2	22.5	0.7	1.7
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	135.3	50.6	41.5	30.9	10.6	1.6	7.5
Cost.....million dollars..	2.7	0.8	0.7	0.5	0.2	(2)	(2)
Generated less sold.....million kw. hrs..	478.3	473.2	465.4	88.9	376.5	3.1	4.8
Contract work.....million dollars..	78.5	51.6	50.4	15.8	34.6	0.4	0.9
Value of shipments and receipts (including resales), total.....do....	2,016.7	893.7	807.8	167.8	640.0	24.1	61.8
Value of resales.....do....	30.3	1.0	0.8	0.1	0.7	(2)	0.1
Value added in mining.....do....	1,524.2	627.4	553.9	113.4	440.5	19.1	54.4
Capital expenditures (except land and mineral rights), total.....do....	248.6	140.4	131.5	35.4	96.1	1.7	7.1
Mineral development and exploration.....do....	28.9	26.5	26.0	22.5	3.5	0.1	0.4
New structures and additions.....do....	13.1	10.0	9.7	1.0	8.7	(2)	0.3
New machinery and equipment.....do....	182.0	86.7	79.8	8.2	71.6	1.3	5.5
Used plant and equipment.....do....	24.5	17.2	16.0	3.7	12.3	0.3	0.9
Mineral development and exploration expenditures, total.....do....	63.7	53.2	52.0	39.3	12.7	0.3	0.9
Capitalized.....do....	28.9	26.5	26.0	22.5	3.5	0.1	0.4
Expensed.....do....	34.9	26.7	26.0	16.8	9.2	0.2	0.5
Man-hours worked by production, development, and exploration workers, total.....millions..	195.5	81.4	70.6	13.4	57.2	1.9	9.1
Operating and maintaining wells.....do....	7.9	2.3	1.3	1.2	0.1	0.1	0.9
Drilling wells and rig building.....do....	74.2	72.9	67.2	11.5	55.7	1.5	4.3
Exploration work (excluding drilling wells).....do....	16.7	0.8	0.8	0.2	0.6	(2)	0.1
Other work.....do....	96.7	5.4	1.3	0.5	0.8	0.3	3.8

See footnotes at end of table.

TABLE 3B. Detailed Statistics by Principal Types of Services: 1967—Continued

Item	1382.—Oil and gas exploration services industry			1389.—Oil and gas field services, n.e.c., industry			
	Total ¹	Geophysical exploration	Other exploration	Total ¹	Well surveying and well logging	Cementing wells	Acidizing and other chemical treatment of wells
Establishments, total.....number..	636	584	41	3,895	239	109	83
With 1 to 19 employees.....do....	537	498	35	3,144	170	59	44
With 20 to 99 employees.....do....	78	69	4	682	57	37	36
With 100 or more employees.....do....	21	17	2	69	12	13	3
All employees (average for the year).....1,000..	8.4	7.0	0.7	54.8	5.6	5.1	2.3
Payroll (all employees), total for year..million dollars..	53.1	43.1	4.3	358.7	44.4	43.0	16.0
Production, development, and exploration workers:							
Average for the year.....1,000..	6.6	6.1	0.5	45.3	4.2	4.3	1.7
March.....do....	6.8	6.3	0.5	45.4	4.4	4.3	1.7
May.....do....	6.6	6.1	0.5	45.4	4.3	4.3	1.6
August.....do....	6.6	6.1	0.5	46.1	4.0	4.3	1.7
November.....do....	6.4	5.9	0.5	44.9	4.1	4.3	1.7
Man-hours, total.....millions..	15.9	14.7	1.2	98.2	9.4	11.7	4.4
Wages.....million dollars..	39.4	36.0	3.4	274.4	32.4	35.8	10.5
Supplemental labor cost not included in payroll.....do....	3.8	3.5	0.3	35.0	6.3	7.0	1.5
Legally required expenditures, including Social Security contributions.....do....	2.6	2.4	0.2	20.7	2.3	2.3	0.7
Payments for voluntary programs.....do....	1.2	1.1	0.1	14.3	4.0	4.7	0.8
Cost of supplies, etc., total.....do....	45.5	42.4	4.0	288.8	33.4	59.1	27.5
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	34.2	31.4	2.8	226.7	31.3	52.8	23.2
Cost of resales.....do....	3.8	3.8	-	13.6	0.2	1.1	1.2
Purchased fuels consumed.....do....	2.6	2.4	0.2	24.6	1.5	4.6	2.8
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	5.3	5.1	0.3	79.4	1.9	10.1	4.5
Cost.....million dollars..	0.1	0.1	(Z)	1.8	0.1	0.4	0.2
Generated less sold.....million kw.-hrs..	-	-	-	5.4	-	-	(Z)
Contract work.....million dollars..	4.8	4.7	0.1	22.1	0.4	0.2	0.2
Value of shipments and receipts (including resales), total.....do....	152.0	142.6	9.3	971.0	126.6	159.7	77.4
Value of resales.....do....	4.4	4.4	-	24.9	0.2	2.2	2.8
Value added in mining.....do....	126.4	118.7	7.6	770.4	103.8	114.0	55.4
Capital expenditures (except land and mineral rights), total.....do....	20.0	18.5	1.4	88.2	10.6	13.3	5.6
Mineral development and exploration.....do....	0.3	0.3	(Z)	2.1	0.1	0.2	(Z)
New structures and additions.....do....	0.2	0.2	(Z)	2.9	0.2	0.2	0.2
New machinery and equipment.....do....	19.1	17.7	1.4	76.2	10.1	12.9	5.0
Used plant and equipment.....do....	0.3	0.3	(Z)	7.0	0.2	(Z)	0.3
Mineral development and exploration expenditures, total.....do....	1.9	1.8	0.2	8.7	0.2	0.4	(Z)
Capitalized.....do....	0.3	0.3	(Z)	2.1	0.1	0.2	-
Expensed.....do....	1.6	1.5	0.1	6.6	(Z)	0.2	-
Man-hours worked by production, development, and exploration workers, total.....millions..	15.9	14.7	1.2	98.2	9.4	11.7	4.4
Operating and maintaining wells.....do....	0.1	(Z)	0.1	5.5	0.1	(Z)	-
Drilling wells and rig building.....do....	0.4	0.4	-	0.9	0.1	(Z)	-
Exploration work (excluding drilling wells).....do....	14.7	13.7	1.0	1.2	0.3	(Z)	(Z)
Other work.....do....	0.7	0.6	0.1	90.6	8.9	11.7	4.4

See footnotes at end of table.

TABLE 3B. Detailed Statistics by Principal Types of Services: 1967—Continued

Item	1389.—Oil and gas field services, n.e.c., industry—Continued							
	Running, cutting, and pulling casing, tubes, and rods			Cleaning out, bailing out, and swabbing wells	Perforating well casing	Installing production equipment	Pumping wells but not operating leases	Other oil and gas field services, n.e.c.
	Total	With well operations	Without well operations					
Establishments, total.....number..	224	26	198	155	77	81	56	2,848
With 1 to 19 employees.....do....	139	16	123	107	52	48	46	2,470
With 20 to 99 employees.....do....	83	10	73	46	24	31	10	349
With 100 or more employees.....do....	2	-	2	2	1	2	-	29
All employees (average for the year).....1,000..	4.6	0.5	4.1	3.2	1.4	1.9	0.7	27.9
Payroll (all employees), total for year..million dollars..	25.7	2.3	23.4	18.4	9.5	11.8	3.6	166.2
Production, development, and exploration workers:								
Average for the year.....1,000..	4.1	0.4	3.7	2.8	1.0	1.7	0.6	24.7
March.....do....	4.1	0.4	3.7	3.0	1.0	1.6	0.6	24.4
May.....do....	4.2	0.4	3.8	2.9	1.0	1.7	0.6	24.6
August.....do....	4.2	0.4	3.8	2.8	1.0	1.7	0.7	25.6
November.....do....	4.1	0.4	3.7	2.8	1.0	1.7	0.6	24.6
Man-hours, total.....millions..	8.4	0.8	7.6	5.9	2.1	3.9	1.3	51.0
Wages.....million dollars..	22.5	1.9	20.6	15.9	6.7	10.5	3.2	136.9
Supplemental labor cost not included in payroll.....do....	2.2	0.2	2.0	1.7	0.7	1.3	0.4	13.8
Legally required expenditures, including Social Security contributions.....do....	1.8	0.2	1.6	1.4	0.4	0.9	0.3	10.4
Payments for voluntary programs.....do....	0.4	(Z)	0.4	0.3	0.3	0.4	0.1	3.4
Cost of supplies, etc., total.....do....	13.7	1.5	12.2	10.6	5.2	12.0	1.3	125.9
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	10.0	1.1	8.9	8.3	4.2	9.2	0.8	86.8
Cost of resales.....do....	0.2	(Z)	0.2	0.3	0.1	1.2	0.1	5.3
Purchased fuels consumed.....do....	2.4	0.2	2.2	1.4	0.8	0.7	0.2	10.3
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	5.2	2.8	2.4	1.9	2.6	1.4	2.0	49.9
Cost.....million dollars..	0.3	0.1	0.2	0.1	0.1	(Z)	(Z)	0.7
Generated less sold.....million kw.-hrs..	(Z)	-	(Z)	0.3	(Z)	-	0.4	4.7
Contract work.....million dollars..	0.9	0.1	0.8	0.5	0.1	0.8	0.1	18.8
Value of shipments and receipts (including resales), total.....do....	59.2	5.8	53.4	43.9	26.8	36.1	7.5	433.7
Value of resales.....do....	0.5	0.1	0.4	0.4	0.1	1.0	0.1	17.6
Value added in mining.....do....	51.2	4.9	46.3	37.1	22.7	26.8	9.4	350.1
Capital expenditures (except land and mineral rights), total.....do....	5.7	0.6	5.1	3.8	1.2	2.7	3.2	42.3
Mineral development and exploration.....do....	0.2	0.1	0.1	0.1	(Z)	0.1	0.4	1.1
New structures and additions.....do....	0.1	(Z)	0.1	0.1	0.1	0.2	-	1.7
New machinery and equipment.....do....	4.7	0.4	4.3	2.9	0.9	2.2	1.3	36.2
Used plant and equipment.....do....	0.7	0.1	0.6	0.7	0.1	0.2	1.5	3.3
Mineral development and exploration expenditures, total.....do....	0.5	0.2	0.3	1.2	4.0	0.2	0.4	1.9
Capitalized.....do....	0.2	0.1	0.1	0.1	(Z)	0.1	0.4	1.1
Expensed.....do....	0.3	0.1	0.2	1.1	4.0	-	-	0.8
Man-hours worked by production, development, and exploration workers, total.....millions..	8.4	0.8	7.6	5.9	2.0	3.9	1.3	51.0
Operating and maintaining wells.....do....	1.6	0.2	1.4	0.7	0.1	0.2	0.6	2.3
Drilling wells and rig building.....do....	0.1	(Z)	0.1	0.1	(Z)	(Z)	0.2	0.3
Exploration work (excluding drilling wells).....do....	0.2	-	0.2	0.1	0.2	-	(Z)	0.4
Other work.....do....	6.5	0.6	5.9	5.0	1.8	3.7	0.5	48.0

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (NA) Not available. (Z) Less than one-half of the unit of measure specified. (D) Withheld to avoid disclosing figures for individual companies.

¹Includes data for central administrative offices and related facilities which were not distributed by detailed type of operation. In industry 1381 there were 34 of these establishments with 0.6 thousand employees and \$6.4 million payroll, in industry 1382 there were 11 of these establishments with 0.7 thousand employees and \$5.6 million payroll, and in industry 1389 there were 23 of these establishments with 2.2 thousand employees and \$19.9 million payroll.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1381	Drilling oil and gas wells:										
	Establishments, total.....	2,347	42.9	294.7	38.7	81.4	255.2	627.4	406.7	893.7	140.4
	Establishments with an average of-										
	0 to 4 employees.....	1,117	1.7	10.0	1.6	3.1	8.7	29.3	25.1	43.0	11.4
	5 to 9 employees.....	307	2.1	12.9	1.9	3.8	10.9	26.8	14.6	37.1	4.3
	10 to 19 employees.....	342	4.8	29.3	4.4	8.6	25.5	62.7	36.2	88.0	10.9
	20 to 49 employees.....	363	11.4	75.8	10.2	22.0	66.5	151.9	96.2	217.0	31.1
	50 to 99 employees.....	142	9.6	67.9	8.7	18.7	58.8	137.7	89.7	200.2	27.2
	100 to 249 employees.....	63	8.6	70.1	7.2	16.8	57.7	142.9	88.9	208.1	23.7
	250 to 499 employees.....	10	3.3	20.4	3.1	5.6	18.8	47.7	27.2	63.3	11.5
	500 to 999 employees.....	3	1.6	8.3	1.6	2.8	8.3	28.4	28.8	37.0	20.2
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	748	0.9	4.7	0.9	1.6	4.2	13.7	7.6	19.0	2.2
1382	Oil and Gas exploration services:										
	Establishments, total.....	636	8.4	53.1	6.6	15.9	39.4	126.4	45.5	152.0	20.0
	Establishments with an average of-										
	0 to 4 employees.....	409	0.6	3.1	0.6	1.1	2.9	12.0	3.9	14.5	1.3
	5 to 9 employees.....	58	0.4	2.5	0.3	0.8	2.1	5.6	1.8	6.8	0.6
	10 to 19 employees.....	70	1.0	6.1	0.8	2.0	5.4	18.5	6.2	21.4	3.3
	20 to 49 employees.....	54	1.8	11.3	1.4	3.3	9.0	27.6	8.8	32.4	4.0
	50 to 99 employees.....	24	1.6	10.6	1.2	3.0	7.4	25.2	7.8	29.5	3.6
	100 to 249 employees.....	21	3.1	19.4	2.2	5.9	12.6	37.4	17.0	47.3	7.1
	250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	269	0.3	1.5	0.3	0.5	1.4	7.2	2.4	8.7	0.8
1389	Oil and gas field services, n.e.c.:										
	Establishments, total.....	3,895	54.8	358.7	45.3	98.2	274.4	770.4	288.8	971.0	88.2
	Establishments with an average of-										
	0 to 4 employees.....	2,029	3.4	18.5	3.2	6.7	16.0	62.4	17.8	73.6	6.7
	5 to 9 employees.....	565	3.8	22.7	3.4	7.1	18.5	50.7	18.2	63.4	5.4
	10 to 19 employees.....	550	7.5	42.2	6.5	13.5	33.8	94.6	30.1	114.1	10.6
	20 to 49 employees.....	543	16.3	99.5	14.0	30.0	79.8	214.4	67.1	258.1	23.4
	50 to 99 employees.....	139	9.1	61.1	7.6	16.4	47.9	127.5	4.23	156.2	13.5
	100 to 249 employees.....	52	7.6	58.2	5.8	13.3	42.1	117.2	53.3	159.0	11.5
	250 to 499 employees.....	12	7.1	56.7	4.8	11.2	36.3	103.7	59.9	146.6	17.1
	500 to 999 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹ ...	1,330	1.8	8.4	1.8	3.3	7.1	29.6	8.1	35.2	2.4

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis-Summary of Industry Receipts and Shipments and Receipts for Primary Services: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts for services of establishments classified in the industry					Receipts for primary services		
		Total	Receipts for primary services	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total received in all industries	Received in this industry	Total received in other industries
		A	B	C	D	E	F	G	H
1381	Drilling oil and gas wells.....1967..	893.7	835.2	45.2	12.3	1.0	873.1	835.2	37.9
	.....1963..	979.3	906.1	45.8	22.7	4.8	951.5	906.1	45.4
1382	Oil and gas exploration services.....1967..	152.0	145.4	(D)	(D)	4.4	146.4	145.4	1.0
	.....1963..	119.8	107.6	0.1	4.0	8.1	112.1	107.6	4.5
1389	Oil and gas field services, n.e.c.....1967..	971.0	925.7	6.3	13.0	26.0	958.8	925.7	33.1
	.....1963..	718.8	624.0	4.7	21.3	68.7	666.1	624.0	42.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963

Code	Type of service and geographic area	Footage	Receipts for services		Code	Type of service and geographic area	Footage	Receipts for services	
		(1,000 feet)	(million dollars)				(1,000 feet)	(million dollars)	
		1967	1967 ¹	1963 ¹			1967	1967	1963
INDUSTRY 1381--DRILLING OIL AND GAS WELLS					INDUSTRY 1381--DRILLING OIL AND GAS WELLS--Con.				
UNITED STATES					SOUTH ATLANTIC DIVISION				
1381- --	Drilling oil and gas eells, total....	(X)	873.1	951.5	1381- --	Drilling oil and gas wells, total....	(X)	10.5	14.5
13818 01	Drilling oil, gas, dry, and service wells.....	125,096	698.5	822.9	13818 01	Drilling oil, gas, dry, and service wells.....	1,457	6.1	13.4
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	17.7	28.1	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	0.6
13818 04	Reworking wells.....	(NA)	69.0	100.5	13818 04	Reworking wells.....	(NA)	0.2	0.5
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	87.9	(³)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	44.3	(³)
UNITED STATES-OFFSHORE					EAST SOUTH CENTRAL DIVISION				
1381- --	Drilling oil and gas wells, total....	(X)	177.7	(NA)	1381- --	Drilling oil and gas wells, total....	(X)	34.9	43.6
13818 01	Drilling oil, gas, dry, and service wells.....	12,145	165.1	(NA)	13818 01	Drilling oil, gas, dry, and service wells.....	6,238	26.9	37.2
13818 02	Drilling in spudding in, and tailing in.....	(NA)	12.6	(NA)	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	0.7
13818 04	Reworking wells.....	(NA)		(NA)	13818 04	Reworking wells.....	(NA)	2.8	5.7
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	-	(NA)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	45.1	(³)
MIDDLE ATLANTIC DIVISION					MISSISSIPPI				
1381- --	Drilling oil and gas wells, total....	(X)	14.0	10.1	1381- --	Drilling oil and gas wells, total....	(X)	25.0	30.4
13813 01	Drilling oil, gas, dry, and service wells.....	3,636	11.8	9.3	13818 01	Drilling oil, gas, dry, and service wells.....	4,904	21.1	25.3
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	0.8	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	5.1
13818 04	Reworking wells.....	(NA)	0.1		13818 04	Reworking wells.....	(NA)	2.4	
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	42.1	(³)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	1.5	(³)
EAST NORTH CENTRAL DIVISION					WEST SOUTH CENTRAL DIVISION				
1381- --	Drilling oil and gas wells, total....	(X)	41.1	41.2	1381- --	Drilling oil and gas wells, total....	(X)	558.2	645.9
13818 01	Drilling oil, gas, dry, and service wells.....	7,492	29.6	34.3	13818 01	Drilling oil, gas, dry, and service wells.....	74,199	443.4	558.0
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	1.1	4.1	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	12.2	12.5
13818 04	Reworking wells.....	(NA)	0.8	2.8	13818 04	Reworking wells.....	(NA)	57.2	75.4
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	9.6	(³)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	45.4	(³)
Ohio					WEST SOUTH CENTRAL-OFFSHORE				
13818 --	Drilling oil and gas wells, total....	(X)	18.0	11.5	13818 01	Drilling oil, gas, dry, and service wells.....	8,860	116.4	(NA)
13818 01	Drilling oil, gas, dry, and service wells.....	3,219	12.6	10.7	Arkansas				
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	0.8	Louisiana				
13818 04	Reworking wells.....	(NA)	0.2		13818 01	Drilling oil, gas, dry, and service wells.....	1,131	4.3	7.3
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	45.2	(³)	Louisiana				
Indiana					1381- --	Drilling oil and gas wells, total....	(X)	234.5	246.4
1381- --	Drilling oil and gas wells.....	(X)	3.4	4.1	13818 01	Drilling oil, gas, dry, and service wells.....	23,003	189.9	224.0
13818 01	Drilling oil, gas, dry, and service wells.....	461	1.9	3.1	13818 02	Drilling in, spudding in, and railing in.....	(NA)	(⁴)	1.6
WEST NORTH CENTRAL DIVISION					13818 04	Reworking wells.....	(NA)	28.0	20.8
1381- --	Drilling oil and gas wells, total....	(X)	33.7	45.1	13818 98	Drilling oil and gas wells, n.s.k..	(X)	16.6	(³)
13818 01	Drilling oil, gas, dry, and service wells.....	8,024	25.2	39.2	North Louisiana				
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	1.0	3.4	13818 01	Drilling oil, gas, dry, and service wells.....	3,089	11.9	26.9
13818 04	Reworking wells.....	(NA)	2.3	2.6	South Louisiana ⁷				
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	5.2	(³)	1381- --	Drilling oil and gas wells, total....	(X)	100.9	216.7
Nebraska					13818 01	Drilling oil, gas, dry, and service wells.....	12,031	76.7	197.1
1381- --	Drilling oil and gas wells.....	(X)	2.6	4.7	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	1.3
13818 01	Drilling oil, gas, dry, and service wells.....	933	2.6	4.3	13818 04	Reworking wells.....	(NA)	19.3	18.3
Kansas					13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	44.9	(³)
1381- --	Drilling oil, and gas wells.....	(X)	24.3	36.0	Offshore Louisiana ⁷				
13818 01	Drilling oil, gas, dry, and service wells.....	6,225	17.9	31.1	13818 01	Drilling oil, gas, dry, and service wells.....	7,883	101.3	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963—Continued

Code	Type of service and geographic area	Footage	Receipts for services		Code	Type of service and geographic area	Footage	Receipts for services	
		(1,000 feet)	(million dollars)				(1,000 feet)	(million dollars)	
		1967	1967	1963			1967	1967	1963
INDUSTRY 1381--DRILLING OIL AND GAS WELLS--Con.					INDUSTRY 1381--DRILLING OIL AND GAS WELLS--Con.				
Oklahoma					East Texas B				
13818 01	Drilling oil, gas, dry, and service wells.....	13,365	58.7	65.9	1381- --	Drilling oil and gas wells, total....	(X)	13.5	14.8
	Texas				13818 01	Drilling oil, gas dry and service wells.....	1,461	7.9	12.8
1381- --	Drilling oil and gas wells, total....	(X)	247.3	311.9	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	0.2
13818 01	Drilling oil, gas, dry, and service wells.....	36,700	190.5	260.8	13818 04	Reworking wells.....	(NA)	1.8	1.8
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	3.6	7.6	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	43.8	(3)
13818 04	Reworking wells.....	(NA)	23.9	43.5	West Texas A				
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	29.3	(3)	1381- --	Drilling oil and gas wells, total....	(X)	70.8	100.3
Texas Gulf Coast A ⁷					13818 01	Drilling oil, gas, dry and service wells.....	8,490	58.2	92.0
1381- --	Drilling oil and gas wells, total....	(X)	32.8	47.3	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	1.0
13818 01	Drilling oil, gas, dry, and service wells.....	4,773	19.8	29.0	13818 04	Reworking wells.....	(NA)	5.3	7.3
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	2.3	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	47.3	(3)
13818 04	Reworking wells.....	(NA)	6.9	16.1	West Texas B				
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	46.1	(3)	1381- --	Drilling oil and gas wells, total....	(X)	17.2	18.2
Texas Gulf Coast B ⁷					13818 01	Drilling oil, gas, dry, and service wells.....	3,331	16.7	16.9
1381- --	Drilling oil and gas wells, total....	(X)	10.8	15.5	13818 04	Reworking wells.....	(NA)	0.4	1.2
13818 01	Drilling oil, gas, dry, and service wells.....	1,291	5.3	11.3	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	46.1	(3)
13818 02	Drilling in, spudding in, and tailing in.....	-	-	0.2	Texas Panhandle				
13818 04	Reworking wells.....	(NA)	5.0	3.9	1381- --	Drilling oil and gas wells, total....	(X)	11.9	19.1
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	0.5	(3)	13818 01	Drilling oil, gas, dry, and service wells.....	1,744	9.3	16.5
South Texas ⁷					13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	0.8
1381- --	Drilling oil and gas wells, total....	(X)	26.2	37.3	13818 04	Reworking wells.....	(NA)	(4)	1.8
13818 01	Drilling oil, gas, dry, and service wells.....	4,023	19.3	31.2	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	42.6	(3)
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	1.5	Off shore Texas ⁷				
13818 04	Reworking wells.....	(NA)	3.0	4.7	13818 01	Drilling oil, gas, dry, and service wells.....	977	15.1	(NA)
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	43.9	(3)	MOUNTAIN DIVISION				
Southwest Texas					1381- --	Drilling oil and gas wells, total....	(X)	87.8	97.9
1381- --	Drilling oil and gas wells, total....	(X)	11.6	8.6	13818 01	Drilling oil, gas, dry, and service wells.....	14,393	72.6	85.4
13818 01	Drilling oil, gas, dry, and service wells.....	3,251	9.9	7.8	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	0.2	2.8
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	0.7	0.1	13818 04	Reworking wells.....	(NA)	3.6	9.7
13818 04	Reworking wells.....	(NA)		0.7	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	11.4	(3)
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	1.0	(3)	Montana				
North Central Texas A					1381- --	Drilling oil and gas wells, total....	(X)	14.7	14.2
1381- --	Drilling oil and gas wells, total....	(X)	18.6	23.0	13818 01	Drilling oil, gas, dry, and service wells.....	2,390	11.9	11.9
13818 01	Drilling oil, gas, dry, and service wells.....	3,961	14.4	20.7	13818 02	Drilling in, spudding in, and tailing in.....	-	-	0.8
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	0.8	13818 04	Reworking wells.....	(NA)	(4)	1.5
13818 04	Reworking wells.....	(NA)	0.1	1.5	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	42.8	(3)
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	44.1	(3)	Wyoming				
North Central Texas B					1381- --	Drilling oil and gas wells, total....	(X)	25.4	26.0
13818 01	Drilling oil, gas, dry, and service wells.....	2,308	7.1	12.2	13818 01	Drilling oil, gas, dry, and service wells.....	4,055	21.5	22.6
East Texas A					13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	1.4
1381- --	Drilling oil and gas wells, total....	(X)	9.3	14.4	13818 04	Reworking wells.....	(NA)	1.0	2.0
13818 01	Drilling oil, gas, dry, and service wells.....	1,090	7.4	10.5	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	42.9	(3)
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(4)	0.2					
13818 04	Reworking wells.....	(NA)	(4)	3.7					
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	41.9	(3)					

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963--Continued

Code	Type of service and geographic area	Footage	Receipts for services		Code	Type of service and geographic area	Footage	Receipts for services	
		(1,000 feet)	(million dollars)				(1,000 feet)	(million dollars)	
		1967	1967	1963			1967	1967	1963
		INDUSTRY 1381--DRILLING OIL AND GAS WELLS--Con.					INDUSTRY 1381--DRILLING OIL AND GAS WELLS--Con.		
	Colorado					PACIFIC OFFSHORE			
1381- --	Drilling oil and gas wells, total....	(X)	9.5	8.7	13818-01	Drilling oil, gas, dry, and service wells.....	3,285	48.7	(NA)
13818 01	Drilling oil, gas, dry, and service wells.....	2,435	8.0	6.9		California			
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	-	0.4	1381- --	Drilling oil and gas wells, total....	(X)	59.8	46.9
13818 04	Reworking wells.....	(NA)	(⁴)	1.4	13818 01	Drilling oil, gas, dry, and service wells.....	7,601	50.0	39.8
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	⁴ 1.5	(³)	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	3.7
	New Mexico				13818 04	Reworking wells.....	(NA)	2.1	3.3
1381- --	Drilling oil and gas wells, total....	(X)	30.4	39.9	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	⁴ 7.7	(³)
13818 01	Drilling oil, gas, dry, and service wells.....	4,691	24.9	35.0		North California			
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(Z)	0.1	13818 01	Drilling oil, gas, dry, and service wells.....	656	3.8	(NA)
13818 04	Reworking wells.....	(NA)	2.0	4.7		East Central California			
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	3.5	(³)	1381- --	Drilling oil and gas wells, total....	(X)	14.5	(NA)
	West New Mexico				13818 01	Drilling oil, gas, dry, and service wells.....	3.5	12.8	(NA)
1381- --	Drilling oil and gas wells, total....	(X)	8.7	(NA)	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	(NA)
13818 01	Drilling oil, gas, dry, and service wells.....	1,535	7.6	(NA)	13818 04	Reworking wells.....	(NA)	(⁴)	(NA)
13818 02	Drilling in, spudding in, and tailing in.....	-	-	(NA)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	⁴ 1.7	(NA)
13818 04	Reworking wells.....	(NA)	0.6	(NA)		South California			
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	0.5	(NA)	1381- --	Drilling oil and gas wells, total....	(X)	3.4	(NA)
	East New Mexico				13818 01	Drilling oil, gas, dry, and service wells.....	500	3.4	(NA)
1381- --	Drilling oil and gas wells, total....	(X)	21.6	(NA)	13818 02	Drilling in, spudding in, and tailing in.....	-	-	(NA)
13818 01	Drilling oil, gas, dry, and service wells.....	3,156	17.2	(NA)	13818 04	Reworking wells.....	(NA)	(Z)	(NA)
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(Z)	(NA)	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	(Z)	(NA)
13818 04	Reworking wells.....	(NA)	1.4	(NA)		Central Coastal California			
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	3.0	(NA)	13818 --	Drilling oil and gas wells, total....	(X)	18.3	(NA)
	PACIFIC DIVISION				13818 01	Drilling oil, gas, dry, and service wells.....	1,358	9.8	(NA)
1381- --	Drilling oil and gas wells, total....	(X)	94.0	53.2	13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	(NA)
13818 01	Drilling oil, gas, dry, and service wells.....	9,657	82.8	46.1	13818 04	Reworking wells.....	(NA)	1.7	(NA)
13818 02	Drilling in, spudding in, and tailing in.....	(NA)	(⁴)	3.7	13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	⁴ 6.8	(NA)
13818 04	Reworking wells.....	(NA)	2.1	3.3		California offshore			
13818 98	Drilling oil and gas wells, n.s.k. ²	(X)	⁴ 9.7	(³)	13818 01	Drilling oil, gas, dry, and service wells.....	1,544	20.2	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963—Continued

Code	Type of service and geographic area	Receipts for Services (million dollars)		Code	Type of service and geographic area	Receipts for Services (million dollars)	
		1967 ¹	1963 ¹			1967 ¹	1963 ¹
		INDUSTRY 1382-- OIL AND GAS EXPLORATION SERVICES				INDUSTRY 1382-- OIL AND GAS EXPLORATION SERVICES--Con.	
	UNITED STATES				TEXAS GULF COAST A ⁷		
1382- --	Oil and gas exploration services, total.....	146.4	112.1	1382- --	Oil and gas exploration services, total.....	17.0	11.9
13828 01	Geophysical exploration.....	117.6	100.1	13828 01	Geophysical exploration.....	13.8	(NA)
13828 03	Other exploration.....	9.6	12.0	13828 03	Other exploration.....	1.5	(NA)
13828 99	Exploration services, n.s.k. ²	19.2	(³)	13828 99	Exploration services, n.s.k. ²	1.7	(NA)
	UNITED STATES-OFFSHORE				SOUTH TEXAS		
1382- --	Oil and gas exploration services, total.....	25.9	(NA)	1382- --	Oil and gas exploration services, total.....	1.8	(NA)
13828 01	Geophysical exploration.....	24.0	(NA)	13828 01	Geophysical exploration.....	1.7	(NA)
13828 03	Other exploration.....	(⁴)	(NA)		EAST TEXAS A		
13828 99	Exploration services, n.s.k. ²	41.9	(NA)	1382- --	Oil and gas exploration service, total.....	3.6	16.3
	WEST NORTH CENTRAL DIVISION			13828 01	Geophysical exploration.....	1.9	(NA)
1382- --	Oil and gas exploration services.....	2.5	53.8		EAST TEXAS B		
	SOUTH ATLANTIC DIVISION			1382- --	Oil and gas exploration services, total.....	1.2	(NA)
1382- --	Oil and gas exploration services.....	1.7	3.1	13828 01	Geophysical exploration.....	1.0	(NA)
	EAST SOUTH CENTRAL DIVISION				WEST TEXAS A		
1382- --	Oil and gas exploration services.....	4.8		1382- --	Oil and gas exploration services, total.....	16.8	7.3
	WEST SOUTH CENTRAL DIVISION			13828 01	Geophysical exploration.....	15.1	(NA)
1382- --	Oil and gas exploration services.....	100.1	72.7		TEXAS PANHANDLE		
13828 01	Geophysical exploration.....	80.8	69.2	1382- --	Oil and gas exploration services, total.....	1.4	(NA)
13828 03	Other exploration.....	6.9	3.5	13828 01	Geophysical exploration.....	1.1	(NA)
13828 09	Exploration services, n.s.k. ²	12.4	(³)		MOUNTAIN DIVISION		
	LOUISIANA			1382- --	Oil and gas exploration services, total.....	15.7	9.7
1382- --	Oil and gas exploration services.....	35.6	19.6	13828 01	Geophysical exploration.....	10.6	6.3
	TEXAS			13828 03	Other exploration.....	1.8	(NA)
1382- --	Oil and gas exploration services, total.....	56.1	46.0	13828 99	Exploration services, n.s.k. ²	3.3	(³)
13828 01	Geophysical exploration.....	45.9	43.0		PACIFIC DIVISION		
13828 03	Other exploration.....	2.4	3.0	1382- --	Oil and gas exploration services.....	18.5	20.1
13828 99	Exploration services, n.s.k. ²	7.8	(³)	13828 01	Geophysical exploration.....	17.4	(NA)

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963—Continued

Code	Service and geographic area	Unit of measure	1967 ^{1 6}		1963 ^{1 6}	
			Receipts for services		Receipts for services	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES N.E.C.						
UNITED STATES						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	958.8	(X)	665.0
13898 01	Cementing wells.....		(X)	118.2	(X)	86.6
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells....	27.0	44.1	}	(NA) 77.2
13898 11	Hydraulic fracturing.....	do.....	27.5	57.6		
13898 03	Perforating well casing.....		(X)	37.3	(X)	30.5
13898 04	Well surveying and well logging.....		(X)	113.4	(X)	119.3
13898 09	Building (erecting), repairing, or dismantling rigs and derricks..		(X)	6.7	(X)	6.6
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	51.4	(X)	57.9
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	30.4	(X)	24.1
13898 18	Excavating slush pits or cellars.....		(X)	4.0	(X)	7.2
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells....	(NA)	48.6	(NA)	36.2
13898 27	Erecting, cleaning, repairing, or dismantling lease tanks.....		(X)	8.5	(X)	5.8
13898 35	Pumping wells but not operating leases.....		(X)	9.9	(X)	8.0
13898 36	Other oil and gas field services.....		(X)	342.1	(X)	205.6
13898 98	Oil and gas field services, n.s.k. ²		(X)	86.7	(X)	(³)
UNITED STATES-OFFSHORE						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	123.0	(X)	(NA)
13898 03	Perforating well casing.....		(X)	3.1	(X)	(NA)
13898 36	Other oil and gas field services.....		(X)	119.7	(X)	(NA)
13898 98	Oil and gas field services n.s.k. ²		(X)	0.2	(X)	(NA)
WEST SOUTH CENTRAL DIVISION						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	622.2	(X)	528.8
13898 01	Cementing wells.....		(X)	74.7	(NA)	81.7
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells....	17.6	27.7	}	(NA) 72.5
13898 11	Hydraulic fracturing.....	do.....	17.2	35.7		
13898 03	Perforating well casing.....		(X)	25.4	(X)	25.9
13898 04	Well surveying and well logging.....		(X)	78.4	(X)	108.9
13898 09	Building (erecting), repairing, or dismantling rigs and derricks..		(X)	4.1	(X)	5.3
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	34.5	(X)	36.5
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	21.2	(X)	15.0
13898 18	Excavating slush pits or cellars.....		(X)	2.6	(X)	4.5
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells....	(NA)	33.8	(NA)	24.5
13898 27	Erecting, cleaning, repairing, or dismantling lease tanks.....		(X)	1.8	(X)	4.3
13898 35	Pumping wells but not operating leases.....		(X)	4.9	(X)	4.2
13898 36	Other oil and gas field services.....		(X)	224.2	(X)	145.4
13898 98	Oil and gas field services, n.s.k. ²		(X)	53.3	(X)	(³)
Arkansas						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	5.9	(X)	(NA)
13898 03	Perforating well casing.....		(X)	0.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	0.9	(X)	(NA)
13898 36	Other oil and gas field services.....		(X)	4.0	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ²		(X)	0.7	(X)	(⁴)
Louisiana						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	229.3	(X)	165.6
13898 01	Cementing wells.....		(X)	30.1	(X)	(NA)
13898 03	Perforating well casing.....		(X)	9.6	(X)	8.5
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	6.0	(X)	4.3
13898 36	Other oil and gas field services.....		(X)	171.5	(X)	152.8
13898 98	Oil and gas field services, n.s.k. ²		(X)	12.0	(X)	(³)
South Louisiana						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	129.6	(X)	(NA)
13898 03	Perforating well casing.....		(X)	6.1	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	3.3	(X)	(NA)
13898 18	Excavating slush pits or cellars.....		(X)	0.3	(X)	(NA)
13898 35	Pumping wells out not operating leases.....		(X)	0.3	(X)	(NA)
13898 36	Other oil and gas field services.....		(X)	110.2	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ²		(X)	9.4	(X)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963--Continued

Code	Service and geographic area	Unit of measure	1967 ^{1 6}		1963 ^{1 6}	
			Receipts for services		Receipts for services	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
			INDUSTRY 1389.--OIL AND GAS FIELD SERVICES N.E.C.--Continued			
	WEST SOUTH CENTRAL DIVISION--Continued					
	Oklahoma					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	77.0	(X)	(NA)
13898 03	Perforating well casing.....	.....	(X)	3.4	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	4.3	(X)	(NA)
13898 25	Cleaning out, bailing out or swabbing wells.....	1,000 wells.....	(NA)	8.8	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	51.8	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	8.1	(X)	(³)
	Texas					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	310.0	(X)	322.5
13898 01	Cementing wells.....	.....	(X)	34.7	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	10.6	17.3	}	(NA)
13898 11	Hydraulic fracturing.....	..do.....	10.4	21.4		
13898 03	Perforating well casing.....	.....	(X)	12.1	(X)	14.9
13898 04	Well surveying and well logging.....	.....	(X)	31.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	23.2	(X)	25.5
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	16.6	(X)	14.3
13898 36	Other oil and gas field services.....	.....	(X)	121.0	(X)	196.8
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	32.5	(X)	(³)
	Texas Gulf Coast A					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	54.2	(X)	(NA)
13898 01	Cementing wells.....	.....	(X)	5.5	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	0.9	1.6	(NA)	(NA)
13898 03	Perforating well casing.....	..do.....	(X)	2.0	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	7.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	1.6	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	2.8	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	27.8	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	5.5	(X)	(NA)
	Texas Gulf Coast B					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	14.6	(X)	(NA)
13898 01	Cementing wells.....	.....	(X)	2.0	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	0.4	0.5	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	1.5	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	2.7	(X)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	6.8	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	1.1	(X)	(NA)
	South Texas					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	30.9	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	0.3	0.7	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	2.0	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	6.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	0.8	(X)	(NA)
13898 25	Cleaning out bailing out, or swabbing wells.....	1,000 wells.....	(NA)	1.6	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	16.8	(X)	(NA)
13898 98	Oil and gas field services n.s.k. ².....	.....	(X)	2.6	(X)	(NA)
	Southwest Texas					
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	8.5	(X)	(NA)
13898 01	Cementing wells.....	.....	(X)	1.7	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	1.0	1.0	(NA)	(NA)
13898 11	Hydraulic fracturing.....	..do.....	0.8	1.6	(NA)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	..do.....	(NA)	0.3	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	2.7	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	1.2	(X)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963--Continued

Code	Service and geographic area	Unit of measure	1967 ^{1 6}		1967 ^{1 6}	
			Receipts for services		Receipts for services	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
			INDUSTRY 1389.--OIL AND GAS FIELD SERVICES N.E.C.--Continued			
WEST SOUTH CENTRAL DIVISION--Continued						
North Central Texas A						
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	19.4	(X)	(NA)
13898 02	Acidizing and other chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	1.0	1.2	(NA)	(NA)
13898 11	Hydraulic fracturing.....	...do.....	0.8	1.7	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	0.9	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	1.9	(X)	(NA)
13898 14	Running, cutting, or pulling casing, tubes, or rods.....	.....	(X)	2.0	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	1.7	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	7.3	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	2.6	(X)	(NA)
North Central Texas B						
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	11.6	(X)	(NA)
13898 11	Hydraulic fracturing.....	1,000 wells.....	0.3	0.6	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	0.4	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	1.8	(X)	(NA)
13898 14	Running, cutting, or pulling casing, tubes, or rods.....	.....	(X)	1.6	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	0.6	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	4.7	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	1.9	(X)	(NA)
East Texas B						
1389- --	Oil and gas field services n.e.c., total.....	.....	(X)	23.5	(X)	(NA)
13898 03	Perforating well casing.....	.....	(X)	1.7	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	2.4	(X)	(NA)
13898 14	Running, cutting, or pulling casing, tubes, or rods.....	.....	(X)	2.9	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(X)	1.1	(X)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	13.7	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	1.7	(X)	(NA)
West Texas A						
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	104.1	(X)	(NA)
13898 02	Acidizing and chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	4.3	7.6	(NA)	(NA)
13898 11	Hydraulic fracturing.....	...do.....	4.6	8.9	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	2.5	(X)	(NA)
13898 04	Well surveying and well logging.....	.....	(X)	6.9	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	9.4	(X)	(NA)
13898 25	Cleaning out, bailing out, swabbing wells.....	1,000 wells.....	(NA)	5.1	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	51.9	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	11.9	(X)	(NA)
West Texas B						
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	21.2	(X)	(NA)
13898 02	Acidizing and chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	1.0	2.0	(NA)	(NA)
13898 11	Hydraulic fracturing.....	...do.....	1.2	2.9	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	0.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	1.5	(X)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	12.8	(X)	(NA)
13898 98	Oil and gas field, n.s.k. ².....	.....	(X)	1.6	(X)	(NA)
Texas Panhandle						
1389- --	Oil and gas field services, n.e.c., total.....	.....	(X)	17.5	(X)	(NA)
13898 02	Acidizing and chemical treatment of wells, excluding hydraulic fracturing.....	1,000 wells.....	0.8	1.1	(NA)	(NA)
13898 03	Perforating well casing.....	.....	(X)	0.3	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....	.....	(X)	2.6	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	2.8	(NA)	(NA)
13898 36	Other oil and gas field services.....	.....	(X)	9.0	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ².....	.....	(X)	1.7	(X)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industry, by Geographic Areas: 1967 and 1963—Continued

Code	Service and geographic area	Unit of measure	1967 ^{1 6}		1963 ^{1 6}	
			Receipts for services		Receipts for services	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES N.E.C.--Continued						
MOUNTAIN DIVISION						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	95.7	(X)	35.4
13898 03	Perforating well casing.....		(X)	3.9	(X)	1.4
13898 04	Well surveying and well logging.....		(X)	11.7	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	6.9	(X)	5.4
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	3.7	(X)	3.0
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	5.5	(X)	3.6
13898 27	Erecting, cleaning, repairing, or dismantling lease tanks.....		(X)	0.9	(X)	0.6
13898 35	Pumping wells but not operating leases.....		(X)	1.6	(X)	0.6
13898 36	Other oil and gas field services.....		(X)	51.8	(X)	20.8
13898 98	Oil and gas field services, n.s.k. ²		(X)	9.7	(X)	(³)
Wyoming						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	26.0	(X)	8.7
13898 03	Perforating well casing.....		(X)	1.4	(X)	0.8
13898 04	Well surveying and well logging.....		(X)	3.1	(X)	(NA)
13898 36	Other oil and gas field services.....		(X)	19.0	(X)	7.9
13898 98	Oil and gas field services, n.s.k. ²		(X)	2.5	(X)	(³)
New Mexico						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	42.3	(X)	16.4
13898 03	Perforating well casing.....		(X)	1.5	(X)	(NA)
13898 04	Well surveying and well logging.....		(X)	4.2	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	3.3	(X)	2.6
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	1.4	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	1.1	(NA)	1.8
13898 35	Pumping wells but not operating leases.....		(X)	1.1	(X)	(NA)
13898 36	Other oil and gas field services.....		(X)	26.0	(X)	12.1
13898 98	Oil and gas field services, n.s.k. ²		(X)	3.7	(X)	(³)
West New Mexico						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	9.4	(X)	(NA)
13898 04	Well surveying and well logging.....		(X)	1.0	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	0.5	(X)	(NA)
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	0.6	(X)	(NA)
13898 36	Other oil and gas field services, n.s.k. ²		(X)	6.7	(X)	(NA)
13898 98	Oil and gas field services.....		(X)	0.6	(X)	(NA)
East New Mexico						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	32.9	(X)	(NA)
13898 03	Perforating well casing.....		(X)	1.2	(X)	(NA)
13898 04	Well surveying and well logging.....		(X)	3.2	(X)	(NA)
13898 14	Running, cutting, and pulling casing, tubes, or rods.....		(X)	2.9	(X)	(NA)
13898 15	Installing production equipment, such as wellhead fittings, pumps, and engines.....		(X)	0.9	(X)	(NA)
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	0.8	(NA)	(NA)
13898 36	Other oil and gas field services.....		(X)	20.7	(X)	(NA)
13898 98	Oil and gas field services, n.s.k. ²		(X)	3.2	(X)	(NA)
PACIFIC DIVISION						
1389- --	Oil and gas field services, n.e.c., total.....		(X)	120.3	(X)	39.6
13898 03	Perforating well casing.....		(X)	3.2	(X)	1.2
13898 04	Well surveying and well logging.....		(X)	11.5	(X)	4.5
13898 14	Running, cutting, and pulling casing, tubes or rods.....		(X)	2.5	(X)	3.8
13898 25	Cleaning out, bailing out, or swabbing wells.....	1,000 wells.....	(NA)	4.9	(NA)	3.8
13898 36	Other oil and gas field services.....		(X)	91.2	(X)	26.3
13898 98	Oil and gas field services n.s.k. ²		(X)	7.0	(X)	(³)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (Z) Less than \$50 thousand. (X) Not applicable. (NA) Not available.

¹In general, contractors prepared one report for all oil and gas field services performed in the United States. These reports were classified on the basis of the largest State in which the service was performed.

²This item represents the total value of receipts for establishments that did not report detailed receipts. For 1967 this also includes estimates for administrative records (companies with less than five employees) which were not mailed report forms. At the United States level these administrative records accounted for \$23.6 million in industry 1381; \$9.6 million in industry 1382; and \$40.4 million in industry 1389.

³In 1963 receipts for services not specified by kind were allocated to reported service categories. In industry 1381 these receipts amounted to approximately \$24.5 million, in industry 1382 these receipts amounted to approximately \$6.7 million, and in industry 1389 these receipts amounted to approximately \$11.9 million.

⁴Figures are combined with not specified by kind to avoid disclosing individual company data.

⁵For 1963, all reported by establishments classified in Kansas.

⁶Value of supplies used in performing the service such as cement used in cementing wells are included with the service for 1967. In 1963 between \$20-\$30 million worth of these supplies were shown under value of products bought and resold without further processing.

⁷For 1963, data for offshore areas were included with figures for adjacent onshore areas.

**TABLE 6B. Drilling Statistics as Reported by Drilling Contractors by
Geographic Area: 1967**

Geographic area	Wells drilled	Footage drilled		Cost of drilling and equipping wells		
		Total	Per well	Total	Per well	Per foot
	(number)	(1,000)	(feet)	(million dollars)	(1,000)	(dollars)
United States.....	24,686	123,914	5,020	561.3	22.7	4.53
East North Central Division.....	2,392	7,193	3,007	22.2	9.3	3.09
Ohio.....	840	3,045	3,625	9.3	11.1	3.05
Indiana.....	170	444	2,612	1.4	8.2	3.15
West North Central Division.....	2,102	7,755	3,689	22.3	10.6	2.88
Nebraska.....	177	898	5,073	1.7	9.7	1.91
Kansas.....	1,771	5,965	3,370	16.6	9.4	2.79
East South Central Division.....	1,159	5,985	5,164	22.5	19.3	3.76
Mississippi.....	725	4,797	6,617	17.5	24.1	3.64
West South Central Division.....	12,831	76,130	5,933	359.0	28.0	4.72
Arkansas.....	244	1,111	4,553	3.8	15.8	3.46
Louisiana.....	3,016	25,041	8,303	152.1	50.4	6.07
North Louisiana.....	821	4,688	5,710	12.1	14.7	2.58
South Louisiana.....	1,329	12,015	9,041	63.7	47.9	5.30
Offshore Louisiana.....	866	8,338	9,628	76.3	88.1	9.15
Oklahoma.....	2,573	13,688	5,320	49.4	19.2	3.61
Texas.....	6,998	36,290	5,186	153.7	22.0	4.24
Texas Gulf Coast A.....	654	4,121	6,301	16.0	24.5	3.88
Texas Gulf Coast B.....	202	1,297	6,421	4.6	23.0	3.58
South Texas.....	641	3,783	5,902	17.2	26.8	4.55
Southwest Texas.....	978	3,700	3,783	8.3	8.5	2.24
North Central Texas A.....	1,055	4,187	3,969	11.7	11.0	2.79
North Central Texas B.....	602	2,104	3,495	5.6	9.3	2.66
East Texas A.....	195	1,142	5,856	6.0	30.8	5.25
East Texas B.....	249	1,546	6,209	6.6	26.5	4.27
West Texas A.....	1,470	8,416	5,725	47.4	32.2	5.63
West Texas B.....	543	3,273	6,028	14.2	26.2	4.34
Texas Panhandle.....	288	1,744	6,056	7.8	27.2	4.50
Offshore Texas.....	121	977	8,074	8.2	67.9	8.41
Mountain Division.....	2,573	13,629	5,297	59.3	23.0	4.35
Montana.....	402	2,066	5,139	9.7	24.1	4.70
Wyoming.....	755	4,090	5,417	18.1	24.0	4.43
New Mexico.....	797	4,459	5,595	20.8	26.1	4.66
West New Mexico.....	254	1,286	5,063	6.6	26.0	5.13
East New Mexico.....	543	3,173	5,843	14.2	26.2	4.48
Pacific Division.....	2,466	9,216	3,737	62.1	25.2	6.74

Note: Detailed figures may not add to totals because of independent rounding.

Standard note: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas: 1967 and 1963

Geographic area and principal type of service	Supplies used and purchased machinery installed					
	Total	Purchased machinery	Steel mill shapes and forms		All other supplies ¹	Undistributed supplies used and purchased machinery installed
			Quantity	Cost		
			(million dollars)	(million dollars)		
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS						
United States.....1967..	322.3	87.1	(NA)	26.5	169.0	39.7
.....1963..	345.2	115.7	75.5	20.8	158.4	50.3
Offshore.....1967..	83.5	41.0	(NA)	7.8	30.7	4.0
East North Central Division.....1967..	12.4	1.5	(NA)	0.9	6.4	3.6
.....1963..	11.5	2.5	3.6	0.8	4.9	3.3
Ohio.....1967..	6.1	0.9	(NA)	0.6	2.8	1.8
.....1963..	3.8	0.9	1.9	0.4	1.7	0.7
Illinois.....1967..	3.6	0.4	(NA)	0.2	2.1	0.9
.....1963..	4.5	0.9	0.8	0.2	1.8	1.7
Michigan.....1967..	1.8	0.2	(NA)	0.2	1.2	0.2
West North Central Division.....1967..	9.9	1.5	(NA)	0.7	6.1	1.6
.....1963..	12.0	2.9	4.4	1.2	6.3	1.5
Kansas.....1967..	7.0	0.9	(NA)	0.6	4.1	1.4
.....1963..	9.5	2.4	3.7	1.1	4.7	1.4
South Atlantic Division.....1967..	3.5	0.5	(NA)	0.8	1.4	0.8
.....1963..	5.1	1.1	3.0	0.6	2.3	1.1
East South Central Division.....1967..	10.2	2.1	(NA)	0.7	6.1	1.3
.....1963..	16.6	2.8	17.3	8.1	7.0	2.7
Mississippi.....1967..	7.3	1.9	(NA)	0.5	4.6	0.3
.....1963..	10.0	2.0	10.2	2.3	4.3	1.4
West South Central Division.....1967..	211.3	57.3	(NA)	20.3	113.2	20.5
.....1963..	247.4	92.0	38.5	11.9	107.3	36.2
Offshore.....1967..	63.0	27.7	(NA)	7.4	26.0	1.9
Louisiana.....1967..	92.4	31.5	(NA)	10.4	44.9	5.6
.....1963..	111.3	56.9	12.0	5.6	41.5	7.4
South Louisiana.....1967..	33.0	9.3	(NA)	2.6	18.6	2.5
.....1963..	² 100.9	² 53.8	² 6.8	² 4.1	² 37.8	² 5.2
Oklahoma.....1967..	23.5	4.6	(NA)	2.2	15.3	1.4
.....1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Texas.....1967..	93.7	20.9	(NA)	7.7	52.0	13.1
.....1963..	101.0	25.1	19.6	4.6	45.0	26.4
Texas Gulf Coast A.....1967..	9.4	1.3	(NA)	0.3	5.6	2.2
.....1963..	² 14.1	² 5.1	² 2.6	² 0.6	² 3.7	² 4.8
Texas Gulf Coast B.....1967..	3.0	0.8	(NA)	0.3	1.7	0.2
.....1963..	² 5.1	² 1.1	² 2.0	² 0.4	² 2.0	² 1.5
South Texas.....1967..	7.8	1.7	(NA)	0.7	4.3	1.1
.....1963..	² 11.9	² 3.4	² 3.3	² 0.8	² 4.7	² 3.0
Southwest Texas.....1967..	3.8	0.3	(NA)	0.1	3.0	0.4
North Central Texas A.....1967..	7.2	1.4	(NA)	0.5	3.9	1.4
.....1963..	6.5	1.1	0.4	0.2	2.9	2.3
North Central Texas B.....1967..	2.7	0.6	(NA)	0.1	1.6	0.4
East Texas A.....1967..	3.8	(D)	(NA)	(D)	1.6	0.4
.....1963..	5.5	1.2	1.0	0.2	1.8	2.2
East Texas B.....1967..	5.3	1.3	(NA)	1.5	2.3	0.2
.....1963..	4.0	0.7	0.3	0.1	1.6	1.7
West Texas A.....1967..	28.5	4.9	(NA)	2.2	18.0	3.4
.....1963..	35.2	9.2	4.7	1.3	19.7	5.0
West Texas B.....1967..	8.3	(D)	(NA)	(D)	5.8	0.1
.....1963..	5.9	1.8	1.9	0.4	3.2	0.4

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas: 1967 and 1963—Continued

Geographic area and principal type of service	Supplies used and purchased machinery installed					
	Total	Purchased machinery	Steel mill shapes and forms		All other supplies ¹	Undistributed supplies used and purchased machinery installed
	(million dollars)	(million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	(million dollars)	(million dollars)
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS—Continued						
West South Central Division—Continued						
Texas Panhandle.....1967..	4.8	(D)	(NA)	(D)	1.7	2.0
.....1963..	7.0	0.4	3.1	0.5	2.6	3.5
Mountain Division.....1967..	35.9	4.6	(NA)	1.8	23.0	6.5
.....1963..	32.1	6.9	5.9	1.6	20.3	3.4
Montana.....1967..	7.5	0.5	(NA)	0.4	3.5	3.1
.....1963..	4.7	1.2	0.3	0.1	2.8	0.6
Wyoming.....1967..	10.7	2.0	(NA)	0.2	6.5	2.0
.....1963..	8.9	2.0	2.6	0.6	5.5	0.8
Colorado.....1967..	3.9	0.5	(NA)	0.2	2.9	0.3
.....1963..	2.2	0.5	1.2	0.2	0.9	0.7
New Mexico.....1967..	11.4	1.4	(NA)	0.5	8.2	1.3
.....1963..	14.5	2.8	1.2	0.5	9.9	1.2
West New Mexico.....1967..	4.5	0.6	(NA)	0.1	3.5	0.3
East New Mexico.....1967..	6.9	0.8	(NA)	0.4	4.7	1.0
Pacific Division.....1967..	35.7	18.8	(NA)	1.0	10.8	5.1
.....1963..	17.0	7.0	1.0	0.2	8.5	1.4
Offshore.....1967..	20.5	13.3	(NA)	0.4	4.7	2.1
California.....1967..	21.0	9.7	(NA)	0.5	6.3	4.5
East Central California.....1967..	3.5	(D)	(NA)	(D)	1.8	0.5
South California.....1967..	7.6	(D)	(NA)	(D)	2.1	1.4
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES						
United States.....1967..	34.2	16.4	1.0	1.8	12.0	4.0
.....1963..	25.5	15.5	1.0	0.9	8.9	5.7
Offshore.....1967..	6.2	3.6	(NA)	0.5	2.1	-
West South Central Division.....1967..	23.1	12.2	0.4	0.8	8.4	1.7
.....1963..	15.9	9.1	0.3	0.5	5.1	1.2
Louisiana.....1967..	6.9	3.3	(Z)	(Z)	2.8	13.0
Texas.....1967..	14.4	8.3	0.3	0.7	5.0	0.4
.....1963..	11.0	6.4	0.1	-	3.5	2.9
Mountain Division.....1967..	3.9	1.6	0.2	0.6	0.8	0.9
.....1963..	2.7	2.1	0.1	-	1.4	0.6
Pacific Division.....1967..	4.5	1.5	0.2	0.4	1.8	0.8
.....1963..	4.6	2.3	0.5	0.2	1.9	0.2
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.						
United States.....1967..	226.7	69.2	(NA)	5.4	121.9	30.2
.....1963..	203.0	62.0	6.8	1.9	74.7	64.4
Offshore.....1967..	(D)	15.0	(NA)	(D)	20.6	(D)
.....1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
East North Central Division.....1967..	9.7	2.4	(NA)	0.9	4.2	2.2
.....1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
West North Central Division.....1967..	10.0	2.2	(NA)	0.2	5.8	1.8
.....1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
South Atlantic Division.....1967..	2.4	0.5	(NA)	0.1	1.5	0.3
.....1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 7A. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas: 1967 and 1963—Continued

Geographic area and principal type of service	Supplies used and purchased machinery installed					
	Total	Purchased machinery	Steel mill shapes and forms		All other supplies¹	Undistributed supplies used and purchased machinery installed
			Quantity	Cost		
			(million dollars)	(million dollars)		
	INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.--Continued					
East South Central Division.....1967..	5.8	1.7	(NA)	0.2	3.0	0.9
1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
West South Central Division.....1967..	153.3	45.6	(NA)	3.4	86.0	18.3
1963..	174.7	50.6	5.1	1.4	65.2	57.6
Louisiana.....1967..	60.3	22.9	(NA)	0.5	33.9	3.0
1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
South Louisiana.....1967..	30.4	11.0	(NA)	0.2	17.6	1.6
1963..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oklahoma.....1967..	15.7	4.0	(NA)	0.4	8.6	1.2
1963..	7.1	2.6	1.0	1.2	2.1	2.3
Texas.....1967..	76.1	18.3	(NA)	2.5	42.9	12.4
1963..	101.7	33.7	3.8	1.0	29.8	37.1
Texas Gulf Coast A.....1967..	16.0	4.1	(NA)	0.1	9.3	2.5
1963..	9.7	2.8	1.0	0.3	4.9	1.8
South Texas.....1967..	9.0	1.7	(NA)	1.4	3.7	2.2
1963..	2.9	1.1	0.9	0.2	0.4	1.1
East Texas B.....1967..	5.1	1.5	(NA)	0.1	2.9	0.6
1963..	3.0	1.1	0.2	0.1	0.9	1.0
West Texas A.....1967..	22.3	5.2	(NA)	0.2	12.6	4.3
1963..	72.9	25.6	0.8	0.2	17.1	29.9
Mountain Division.....1967..	22.3	7.2	(NA)	0.2	11.3	3.6
1963..	7.9	3.8	0.8	0.2	1.7	2.2
New Mexico.....1967..	10.4	3.2	(NA)	0.1	5.1	2.0
1963..	3.9	1.9	0.5	0.1	0.9	1.0
Pacific Division.....1967..	22.1	9.0	(NA)	1.1	9.0	3.0
1963..	7.4	2.4	0.7	0.2	2.9	2.0
California.....1967..	14.3	3.6	(NA)	1.1	6.6	3.0

Note: The sum of the detail may not add to totals due to independent rounding.

Standard notes: -Represents zero. (NA) Not available. (Z) Represents less than one half of the unit of measure specified. (D) Withheld to avoid disclosing data for individual companies.

¹Includes the cost of gas purchased for gas lift which amounted to \$0.2 million dollars for 1381, 1382, and 1389 at the United States level.

²For 1963 includes figures for offshore activity.

TABLE 7B. Selected Fuels Used by Geographic Area: 1967 and 1963

Geographic area and principal type of service	Fuels produced and used at this establishment for power or heat		Purchased fuel											
	Crude petroleum, including large condensate (1,000 barrels)	Natural gas (million cubic feet)	Total cost (million dollars)	Gas-natural, manufactured, and mixed		Gasoline		Distillate fuel oil		Residual fuel oil		Other fuels, liquefied petroleum gas, coal coke, wood, and others (million dollars)	Undistributed purchased fuels (million dollars)	
				Quantity (million cubic feet)	Cost (million dollars)	Quantity (1,000 gallons)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)			
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS														
United States....1967..	4.0	344.0	31.1	29,454.0	3.7	9,802.0	3.0	2,551.0	13.1	114.7	0.5	4.7	6.1	
1963..	5.0	804.0	41.7	25,002.0	5.0	22,351.0	5.6	2,109.0	10.2	490.0	1.6	11.2	8.1	
Offshore.....1967..	(NA)	(NA)	2.4	(NA)	(Z)	(NA)	(D)	(NA)	2.2	(NA)	-	(D)	-	
Middle Atlantic Division.....1967..	-	-	0.3	34.0	(Z)	189.0	0.1	44.8	0.2	-	-	(Z)	-	
1963..	-	-	0.5	49.0	(NA)	257.0	(NA)	25.0	(NA)	2.0	(NA)	0.1	0.2	
East North Central Division.....1967..	-	5.0	1.7	174.0	(Z)	947.0	0.3	131.3	0.7	3.8	(Z)	0.1	0.6	
1963..	-	451.0	2.0	169.0	(NA)	1,011.0	(NA)	106.0	(NA)	3.0	(NA)	0.2	1.0	
Ohio.....1967..	-	5.0	0.6	103.0	(Z)	299.0	0.1	50.8	0.3	(D)	(Z)	(Z)	0.2	
1963..	-	451.0	0.5	127.0	(NA)	286.0	(NA)	20.0	(NA)	-	(NA)	(Z)	0.2	
Illinois.....1967..	-	-	0.6	8.0	(Z)	400.0	0.1	45.1	0.3	(D)	(Z)	(Z)	0.2	
1963..	-	-	0.8	42.0	(NA)	443.0	(NA)	33.0	(NA)	-	(NA)	0.1	0.4	
Michigan.....1967..	-	-	0.3	63.0	(Z)	(D)	(D)	29.1	0.2	-	-	(Z)	-	
1963..	-	-	0.5	-	(NA)	443.0	(NA)	7.0	(NA)	-	(NA)	0.1	0.7	
West North Central Division.....1967..	-	(D)	1.5	312.0	0.1	2,124.0	0.3	143.8	0.8	13.0	0.1	0.1	0.2	
1963..	5.0	-	2.1	519.0	(NA)	1,403.0	(NA)	145.0	(NA)	75.0	(NA)	0.4	0.2	
Kansas.....1967..	-	(D)	1.1	(D)	(Z)	792.0	0.2	93.6	0.5	(D)	(D)	0.1	0.2	
1963..	5.0	-	1.7	519.0	(NA)	1,233.0	(NA)	116.0	(NA)	59.0	(NA)	0.3	0.3	
South Atlantic Division.....1967..	4.0	6.0	0.4	220.0	0.1	185.0	0.1	26.1	0.2	1.7	(Z)	(Z)	-	
1967..	-	-	(Z)	222.0	(NA)	354.0	(NA)	18.0	(NA)	5.0	(NA)	(Z)	0.2	
East South Central Division.....1967..	-	-	1.3	894.0	0.3	455.0	0.1	83.3	0.5	1.8	(Z)	0.2	0.2	
1963..	-	-	2.2	641.0	(NA)	1,713.0	(NA)	138.0	(NA)	30.0	(NA)	0.5	0.6	
Mississippi.....1967..	-	-	0.8	632.0	0.2	316.0	0.1	62.8	0.4	1.0	(Z)	0.2	-	
1963..	-	-	1.5	630.0	(NA)	1,406.0	(NA)	105.0	(NA)	19.0	(NA)	0.4	0.3	
West South Central Division.....1967..	15.0	537.0	19.7	12,930.0	2.8	5,882.0	1.8	1,602.4	8.1	71.5	0.3	3.6	3.1	
1963..	-	347.0	28.7	21,921.0	(NA)	14,945.0	(NA)	1,330.0	(NA)	316.0	(NA)	8.4	5.0	
Louisiana.....1967..	-	420.0	6.7	1,711.0	0.5	969.0	0.3	1,024.7	4.9	21.5	0.1	0.3	0.6	
1963..	-	144.0	9.4	3,789.0	(NA)	3,241.0	(NA)	933.0	(NA)	172.0	(NA)	1.5	1.0	
South Louisiana..1967..	(NA)	(NA)	4.1	(NA)	0.3	(NA)	0.2	(NA)	3.0	(NA)	0.1	0.1	0.4	
1963..	-	147.0	18.0	13,018.0	(NA)	12,318.0	(NA)	1956.0	(NA)	170.0	(NA)	11.2	10.6	
Oklahoma.....1967..	-	15.0	2.5	2,421.0	0.5	1,053.0	0.3	107.9	0.6	14.7	0.1	0.6	0.4	
1963..	-	8.0	4.4	3,087.0	(NA)	1,915.0	(NA)	64.0	(NA)	12.0	(NA)	1.9	1.0	
Texas.....1967..	-	102.0	10.3	8,676.0	1.7	3,751.0	1.1	465.7	2.6	31.5	0.1	(Z)	4.8	
1963..	-	195.0	14.6	15,036.0	(NA)	9,606.0	(NA)	266.0	(NA)	126.0	(NA)	5.0	2.8	
Texas Gulf Coast A.1967..	(NA)	(NA)	1.2	(NA)	0.2	(NA)	0.1	(NA)	0.4	(NA)	(Z)	0.2	0.3	
1963..	-	11.0	11.8	1,044.0	(NA)	11,243.0	(NA)	165.0	(NA)	123.0	(NA)	10.5	10.3	
South Texas.....1967..	(NA)	(NA)	1.1	(NA)	0.1	(NA)	0.3	(NA)	0.2	(NA)	(D)	0.1	0.3	
1963..	-	137.0	12.1	12,793.0	(NA)	12,234.0	(NA)	180.0	(NA)	133.0	(NA)	10.4	10.4	
North Central Texas A.....1967..	(NA)	(NA)	10.0	(NA)	0.1	(NA)	0.2	(NA)	0.1	(NA)	(D)	3.7	5.9	
1963..	-	20.0	5.4	507.0	(NA)	607.0	(NA)	2.0	(NA)	12.0	(NA)	0.4	0.4	
East Texas A.....1967..	(NA)	(NA)	0.4	(NA)	(Z)	(NA)	(Z)	(NA)	(D)	(NA)	(Z)	0.1	0.1	
1963..	-	28.0	0.8	299.0	(NA)	196.0	(NA)	8.0	(NA)	-	(NA)	0.3	0.4	
West Texas A.....1967..	(NA)	(NA)	3.2	(NA)	0.9	(NA)	0.2	(NA)	0.9	(NA)	(Z)	0.9	0.3	
1963	-	-	4.7	8,249.0	(NA)	2,800.0	(NA)	15.0	(NA)	15.0	(NA)	1.9	0.5	
West Texas B.....1967..	(NA)	(NA)	0.7	(NA)	0.1	(NA)	0.1	(NA)	(D)	(NA)	-	0.3	0.1	
1963..	-	-	0.7	249.0	(NA)	405.0	(NA)	18.0	(NA)	7.0	(NA)	0.4	0.1	
Mountain Division.....1967..	-	174.0	4.6	14,386.0	0.5	795.0	0.3	304.2	1.7	-	-	0.7	1.4	
1963..	-	4.0	3.8	1,270.0	(NA)	1,864.0	(NA)	169.0	(NA)	31.0	(NA)	1.3	0.6	
Montana.....1967..	-	-	0.9	122.0	(Z)	141.0	(Z)	45.7	0.2	-	-	0.1	0.6	
1963..	-	-	0.7	12.0	(NA)	210.0	(NA)	49.0	(NA)	-	(NA)	0.2	0.1	

See footnotes at end of table.

TABLE 7B. Selected Fuels Used by Geographic Area: 1967 and 1963--Continued

Geographic area and principal type of service	Fuels produced and used at this establishment for power or heat		Purchased fuel											
	Crude petroleum, including large condensate (1,000 barrels)	Natural gas (million cubic feet)	Total cost (million dollars)	Gas-natural, manufactured, and mixed		Gasoline		Distillate fuel oil		Residual fuel oil		Other fuels, liquefied petroleum gas, coal, coke, wood, and others (million dollars)	Undis-tributed purchased fuels (million dollars)	
				Quantity (million cubic feet)	Cost (million dollars)	Quantity (1,000 gallons)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)			
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS--Continued														
MOUNTAIN Division--Con.														
Wyoming.....1967..	-	17.0	1.5	12,712.0	(D)	271.0	(D)	167.7	0.9	-	-	0.2	0.2	
1963..	-	-	1.2	87.0	(NA)	814.0	(NA)	71.0	(NA)	9.0	(NA)	0.4	0.2	
Colorado.....1967..	-	-	0.6	81.0	(Z)	105.0	(Z)	49.9	0.3	-	-	(Z)	0.3	
1963..	-	4.0	0.4	12.0	(NA)	286.0	(NA)	8.0	(NA)	-	(NA)	0.1	0.2	
New Mexico.....1967..	-	12.0	1.3	1,205.0	0.3	257.0	0.1	26.5	0.1	-	-	0.3	0.5	
1963..	-	-	1.3	1,064.0	(NA)	428.0	(NA)	35.0	(NA)	1.0	(NA)	0.5	0.1	
West New Mexico....1967..	(NA)	(NA)	0.5	(NA)	(Z)	(NA)	(Z)	(NA)	(Z)	(NA)	-	0.1	0.4	
East New Mexico....1967..	(NA)	(NA)	0.8	(NA)	(D)	(NA)	(Z)	(NA)	0.2	(NA)	-	0.3	-	
Pacific Division.....1967..	-	2.0	1.6	504.0	0.1	415.0	0.1	215.0	0.9	22.8	0.1	0.1	0.3	
1963..	-	-	1.8	211.0	(NA)	796.0	(NA)	179.0	(NA)	30.0	(NA)	0.3	0.2	
Offshore.....1967..	(NA)	(NA)	0.3	-	-	(NA)	(D)	(NA)	0.3	(NA)	-	-	(D)	
California.....1967..	-	2.0	1.3	504.0	0.1	372.0	0.1	109.1	0.6	22.8	0.1	0.1	0.3	
1963..	-	-	1.8	211.0	(NA)	754.0	(NA)	176.0	(NA)	27.0	(NA)	0.3	0.2	
East Central California.....1967..	(NA)	(NA)	0.6	(NA)	(Z)	(NA)	(Z)	(NA)	0.2	(NA)	0.1	(Z)	0.3	
South California...1967..	(NA)	(NA)	0.4	(NA)	(Z)	(NA)	(NA)	(Z)	0.1	(NA)	-	(Z)	0.2	
INDUSTRY 1382.--OIL AND GAS EXPLORATION SERVICES														
United States....1967..	-	6.0	2.6	-	-	4,505.0	1.4	46.5	0.2	1.0	(Z)	0.2	0.8	
1963..	-	-	3.1	51.0	(Z)	8,334.0	2.3	63.0	0.3	1.0	(Z)	0.3	0.1	
Offshore.....1967..	(NA)	(NA)	0.5	-	-	(NA)	0.1	(NA)	0.2	-	-	-	0.2	
West South Central Division.....1967..	-	6.0	1.7	-	-	2,840.0	0.9	38.8	0.2	0.3	(Z)	(Z)	0.6	
1963..	-	-	2.1	40.0	(NA)	5,775.0	(NA)	34.0	(NA)	1.0	(NA)	0.3	0.1	
Louisiana.....1967..	-	6.0	0.5	-	-	430.0	0.2	27.6	0.1	-	-	(Z)	0.2	
1963..	-	-	0.6	13.0	(NA)	1,122.0	(NA)	23.0	(NA)	-	(NA)	(Z)	0.1	
Texas.....1967..	-	-	1.0	-	-	1,866.0	0.6	8.6	(Z)	0.2	(Z)	0.1	0.1	
1963..	-	-	1.2	16.0	(NA)	3,976.0	(NA)	18.0	(Z)	(Z)	(NA)	0.2	-	
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.														
United States....1967..	-	32.0	24.6	12,208.0	0.8	45,560.0	13.1	663.5	3.7	53.3	0.2	1.5	5.4	
1963..	-	12.0	26.4	2,439.0	0.5	64,686.0	15.9	269.0	1.5	43.0	0.1	1.8	6.6	
Offshore.....1967..	(NA)	(NA)	(NA)	(NA)	(Z)	(NA)	0.1	(NA)	(D)	-	-	(D)	(NA)	
Northeast Region.....1967..	-	-	0.2	20.0	(Z)	432.0	0.1	4.0	(Z)	-	-	(Z)	0.1	
East North Central Division.....1967..	-	-	1.1	151.0	(Z)	2,458.0	0.7	12.9	0.1	0.1	(Z)	(Z)	0.3	
West North Central Division.....1967..	-	-	1.8	1,908.0	(Z)	3,045.0	0.9	57.3	0.1	-	-	0.3	0.5	
South Atlantic Division.....1967..	-	-	0.2	13.0	(Z)	477.0	0.1	5.8	(Z)	-	-	(Z)	0.1	
East South Central Division.....1967..	-	6.0	0.6	83.0	(Z)	1,439.0	0.4	6.8	(Z)	1.4	(Z)	(Z)	0.2	
West South Central Division.....1967..	-	16.0	15.6	9,538.0	0.6	29,203.0	8.3	418.9	2.3	49.8	0.2	0.8	3.4	
1963..	-	12.0	21.4	2,339.0	(NA)	54,970.0	(NA)	227.0	(NA)	41.0	(NA)	1.4	3.2	

See footnotes at end of table.

TABLE 7B. Selected Fuels Used by Geographic Area: 1967 and 1963-Continued

Geographic area and principal type of service	Fuels produced and used at this establishment for power or heat		Purchased fuel											
	Crude petroleum, including large condensate (1,000 barrels)	Natural gas (million cubic feet)	Total cost (million dollars)	Gas-natural, manufactured, and mixed		Gasoline		Distillate fuel oil		Residual fuel oil		Other fuels, liquefied petroleum gas, coal, coke, wood, and others (million dollars)	Undistributed purchased fuels (million dollars)	
				Quantity (million cubic feet)	Cost (million dollars)	Quantity (1,000 gallons)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)			
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.--Con.														
West South Central Division--Con.														
Louisiana.....1967..	-	-	4.1	220.0	0.1	7,718.0	2.2	218.2	1.2	35.9	0.1	(Z)	0.5	
1963..	-	-	5.9	729.0	(NA)	13,296.0	(NA)	159.0	(NA)	4.0	(NA)	0.5	0.5	
South Louisiana....1967..	(NA)	(NA)	2.4	(NA)	-	(NA)	0.1	(NA)	-	(NA)	-	-	2.3	
1963..	-	-	¹ 0.5	¹ 703.0	(NA)	¹ 13,096.0	(NA)	¹ 157.0	(NA)	¹ 4.0	(NA)	¹ 0.5	¹ 0.4	
Offshore Louisiana.1967..	(NA)	(NA)	1.3	(NA)	-	(NA)	(Z)	(NA)	0.1	(NA)	-	-	1.2	
Oklahoma.....1967..	-	3.0	2.4	7,819.0	0.1	4,577.0	1.4	63.4	0.3	7.7	0.1	0.1	0.4	
1963..	-	4.0	1.5	45.0	(NA)	2,597.0	(NA)	14.0	(NA)	4.0	(NA)	0.2	0.4	
Texas.....1967..	-	13.0	9.0	1,489.0	0.4	16,661.0	4.7	134.0	0.8	6.2	(Z)	0.6	2.5	
1963..	-	8.0	13.9	1,513.0	(NA)	39,870.0	(NA)	54.0	(NA)	31.0	(NA)	0.7	2.2	
Texas Gulf Coast A.1967..	(NA)	(NA)	1.2	(NA)	-	(NA)	0.1	(NA)	(Z)	(NA)	-	(Z)	1.1	
1963..	-	¹ 8.0	¹ 1.0	¹ 37.0	(NA)	¹ 1,874.0	(NA)	¹ 5.0	(NA)	¹ 1.0	(NA)	¹ 0.1	¹ 0.4	
South Texas.....1967..	(NA)	(NA)	0.8	(NA)	-	(NA)	(Z)	(NA)	(Z)	(NA)	-	(Z)	0.8	
1963..	-	-	¹ 0.5	¹ 25.0	(NA)	¹ 852.0	(NA)	(Z)	(NA)	¹ 1.0	(NA)	(Z)	¹ 0.3	
East Texas B.....1967..	(NA)	(NA)	0.7	(NA)	-	(NA)	(Z)	(NA)	-	(NA)	-	-	0.7	
1963..	-	-	0.6	275.0	(NA)	1,088.0	(NA)	5.0	(NA)	-	(NA)	(Z)	0.2	
West Texas A.....1967..	(NA)	(NA)	3.6	(NA)	-	(NA)	0.2	(NA)	(Z)	(NA)	(Z)	0.1	3.2	
1963..	-	-	10.2	940.0	(NA)	31,286.0	(NA)	33.0	(NA)	24.0	(NA)	0.4	0.8	
Mountain Division.....1967..	-	10.0	3.1	399.0	0.1	5,866.0	1.7	80.9	0.5	0.9	(Z)	0.3	0.4	
1963..	-	-	1.6	26.0	(NA)	2,714.0	(NA)	-	(NA)	30.0	(NA)	0.2	0.5	
New Mexico.....1967..	-	-	1.4	256.0	0.1	2,759.0	0.8	27.9	0.2	0.9	(Z)	0.2	0.1	
1963..	-	-	0.7	1.0	(NA)	1,076.0	(NA)	11.0	(NA)	-	(NA)	0.1	0.2	
Pacific Division.....1967..	-	-	2.0	96.0	(Z)	2,640.0	0.8	76.9	0.6	1.0	(Z)	(Z)	0.6	
1963..	-	-	1.0	9.0	(NA)	2,095.0	(NA)	6.0	(NA)	1.0	(NA)	0.1	0.3	
California.....1967..	-	-	1.5	86.0	(Z)	2,324.0	0.7	36.6	0.3	1.0	(Z)	(Z)	0.5	
1963..	-	-	1.0	9.0	(NA)	1,635.0	(NA)	3.0	(NA)	(Z)	(NA)	0.1	0.3	

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero.

(D) Withheld to avoid disclosing data for individual companies.

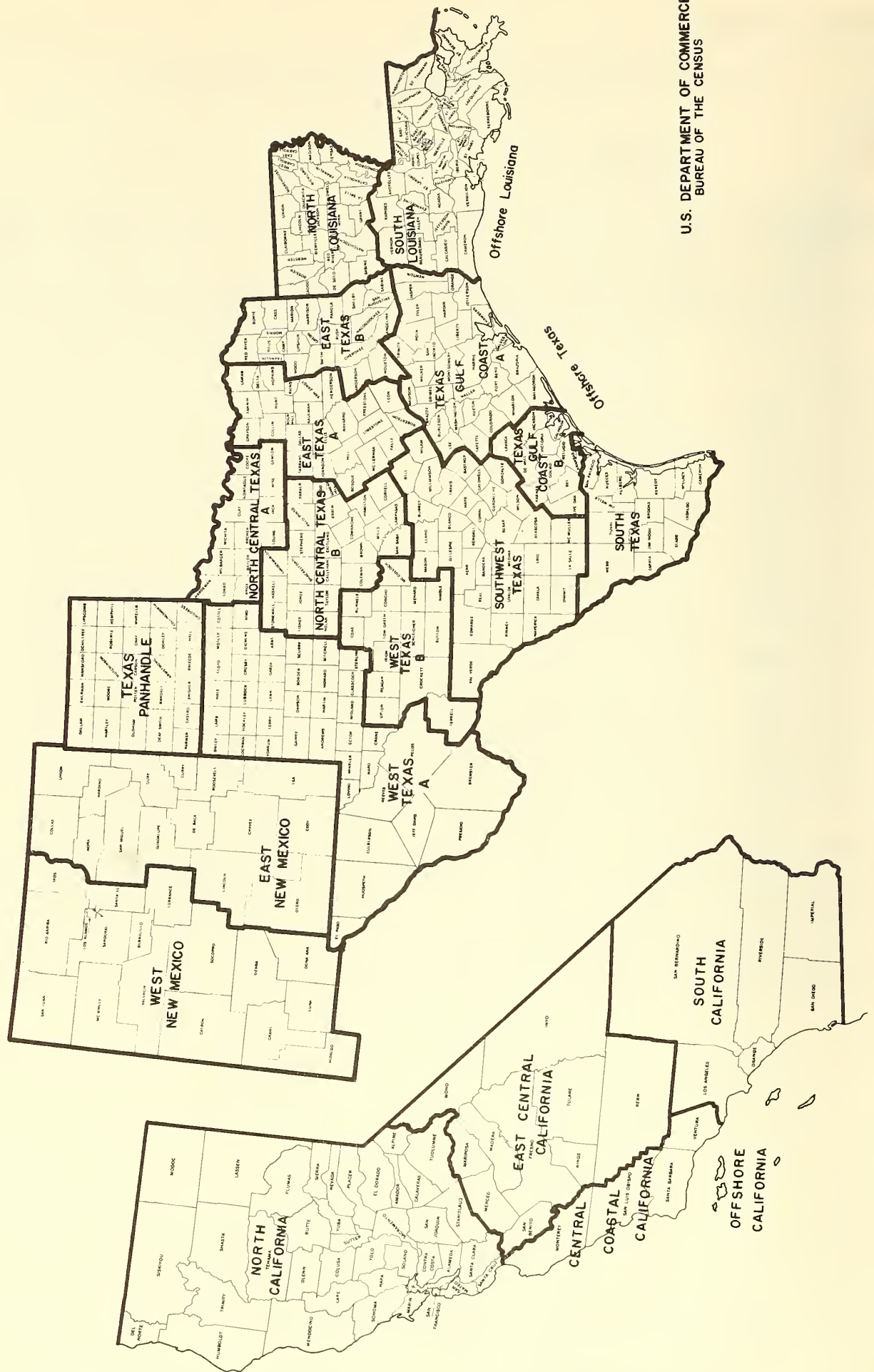
(NA) Not available.

(Z) Represents

less than one half of the unit of measure specified.

¹Includes figures for offshore.

1967 CENSUS OF MINERAL INDUSTRIES DISTRICT MAP FOR LOUISIANA, TEXAS, NEW MEXICO, AND CALIFORNIA



U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.



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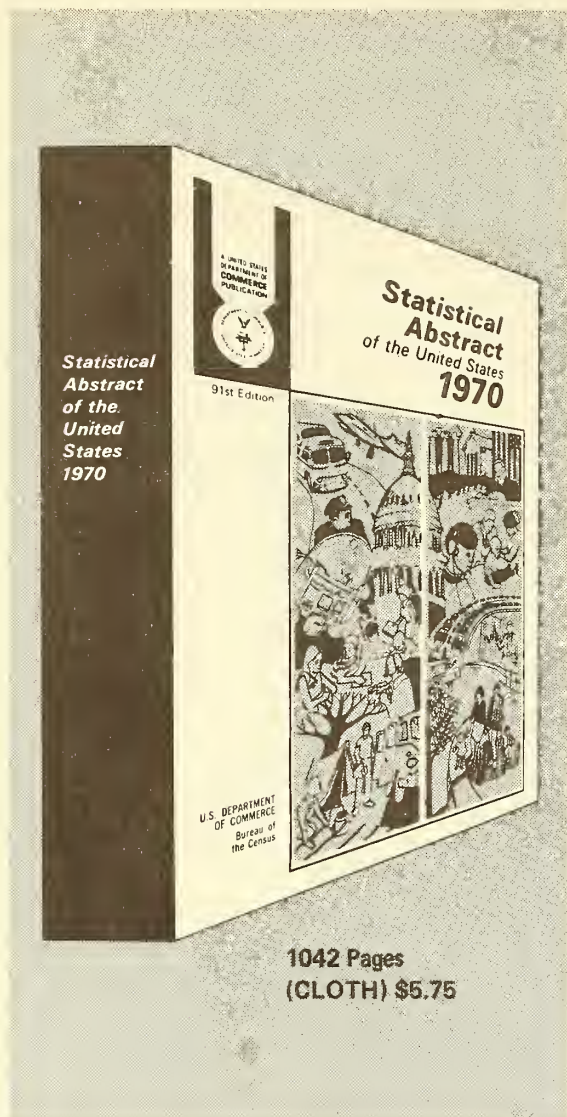
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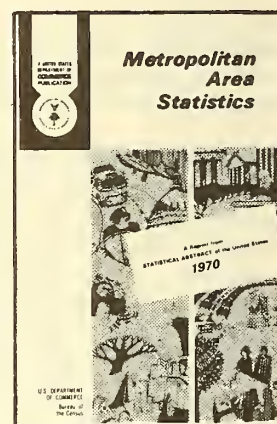
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1967 Census of MINERAL INDUSTRIES



INDUSTRY SERIES

Supplement
7(1)-13C

U.S. DEPARTMENT OF COMMERCE/Bureau of the Census

Oil and Gas Field Services SIC Code 138

This supplemental report includes a table on statistics for operating companies ranked by value of company shipments that was originally intended to be included in the Oil and Gas Field Services report, MIC67(1)-13C, and therefore, retains the original table number of that report.

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 138, Oil and Gas Field Services. The separate industries included in this group are as follows:

SIC Code and Title

- 1381--Drilling Oil and Gas Wells
- 1382--Oil and Gas Exploration Services
- 1389--Oil and Gas Field Services, Not Elsewhere Classified

All data in this supplemental report pertain to the entire Industry Group 138. Comparable data for individual industries included in this group are not available. This report includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1381, Drilling Oil and Gas Wells.-- This industry represents establishments primarily engaged in drilling

wells for oil or gas for others on a contract, fee, or other basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.

Industry 1382, Oil and Gas Exploration Services.-- This industry represents establishments primarily engaged in geophysical, geological, and other exploration work on a contract, fee, or other basis.

Industry 1389, Oil and Gas Field Services, N.E.C.-- This industry represents establishments primarily engaged in performing, for others on a contract, fee, or other basis, oil and gas field services, not elsewhere classified, such as excavating slush pits and cellars; grading, and building foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

Establishments primarily engaged in hauling oil and gas field supplies and equipment, and in oil and gas field machine-shop work, are not included in the mining division, according to the Standard Industrial Classification, and were not covered in the 1967, 1963, 1958, and 1954 censuses. In the 1939 census, when such establishments were included, receipts for hauling and machine-shop services accounted for about 8 percent of the total receipts for oil and gas field services, as then defined.

A table 8B, "Detailed Statistics for Operating Companies by Geographic Area: 1967" was originally announced for inclusion in this supplemental report. This table was intended to show data reported on a net working-interest basis and would have provided operator statistics in the same format for comparative purposes. However, it was not feasible to publish data reported on a net working-interest basis. Data reported on an operator basis are available by geographic area from table 3A of MIC67(1)-13C.

TABLE 8A. Detailed Statistics For Operating Companies Ranked By Value of Company Shipments and Receipts: 1967

Item	All operating companies ¹	Operating companies ranked by value of shipments and receipts								
		First 8 companies	Next 8 (companies 9-16)	Next 8 (companies 17-24)	Next 8 (companies 25-32)	Next 18 (companies 33-50)	First 50 companies	Next 18 (companies 51-68)	Next 32 (companies 69-100)	First 100 companies
Operating companies.....number..	5,669	8	8	8	8	18	50	18	32	100
Establishments.....do.....	6,878	271	112	69	45	104	601	59	91	751
Value of shipments and receipts, total.....million dollars..	2,016.7	478.3	136.6	106.6	77.6	100.5	899.6	73.5	96.3	1,069.4
Value added in mining.....do.....	1,524.2	348.5	105.0	88.2	43.6	70.0	655.3	48.2	63.6	767.1
Total employment.....1,000..	106.1	16.3	6.1	5.6	2.9	4.8	35.7	3.3	4.3	43.3
Production, development, exploration workers.....do.....	90.6	11.8	4.5	4.6	2.5	4.3	27.7	2.7	3.8	34.2
All other employees.....do.....	15.5	4.5	1.6	1.0	0.4	0.5	8.0	0.6	0.5	9.1
Man-hours worked by production, development, and exploration workers, total.....million..	195.5	30.2	9.6	8.1	5.7	7.8	61.4	5.7	8.2	75.3
Operating and maintaining wells.....do.....	7.9	-	0.1	-	-	(Z)	0.1	(Z)	0.4	0.5
Drilling wells and rig building.....do.....	74.2	2.7	5.3	6.0	3.8	5.0	22.8	4.1	4.8	31.7
Exploration work (except drilling).....do.....	16.7	2.4	2.4	1.1	0.9	(Z)	6.9	(Z)	1.5	8.3
Other work.....do.....	96.7	25.1	1.8	1.0	1.0	2.7	31.6	1.6	1.6	34.8
Payroll.....million dollars..	706.5	141.5	47.0	35.2	25.7	35.5	284.9	25.0	32.6	342.5
Wages of production, development, and exploration workers.....do.....	569.0	98.8	33.0	26.8	21.4	30.6	210.6	18.2	28.4	257.2
Salaries of all other employees.....do.....	137.5	42.7	14.0	8.4	4.3	4.9	74.3	6.8	4.2	85.3
Supplemental labor costs not included in payrolls ².....do.....	70.0	18.5	4.6	5.2	2.3	3.1	33.7	2.3	3.4	39.4
Legally required expenditures, including Social Security contributions.....do.....	48.4	7.9	3.2	3.9	2.0	1.9	18.9	1.8	2.5	23.2
Payments for voluntary programs.....do.....	21.6	10.5	1.4	1.2	0.4	1.2	14.7	0.5	0.9	16.1
Total cost of supplies, etc.....do.....	741.0	193.3	51.0	44.9	42.5	32.8	364.5	36.8	42.7	444.0
Supplies, gas purchased for gas lift and repressuring, purchased machinery installed, and purchases for resale.....do.....	601.5	164.4	43.5	41.3	34.6	27.3	311.1	30.3	31.9	373.3
Purchased fuel and purchased electric energy.....do.....	61.0	10.8	3.4	1.7	2.1	3.3	21.3	2.4	3.8	27.5
Subcontract work.....do.....	78.5	18.1	4.1	1.9	5.8	2.2	32.1	4.1	7.0	43.2
Capital expenditures, total.....do.....	248.6	63.5	19.4	26.5	16.4	2.2	128.0	11.5	10.0	149.5
Mineral development and exploration.....do.....	28.9	18.0	0.3	(Z)	(Z)	0.3	18.6	0.6	0.7	19.9
New structures and additions.....do.....	13.1	1.5	0.4	0.2	0.5	0.2	2.8	6.6	0.1	9.5
New machinery and equipment.....do.....	182.0	43.4	18.0	23.7	13.6	1.0	99.7	3.7	7.4	110.8
Used plant and equipment.....do.....	24.5	0.6	0.7	2.6	2.3	0.7	6.9	0.6	1.8	9.3
Mineral development and exploration expenditures expensed.....do.....	34.9	5.5	1.0	3.7	0.1	0.5	10.8	2.1	2.8	15.7
Cost of drilling and equipping wells completed during 1967, total.....do.....	44.8	(D)	(D)	-	(D)	(D)	21.1	2.4	0.4	23.9
Source of funds:										
Operators.....do.....	18.6	(D)	(D)	-	(D)	(D)	5.8	0.5	0.1	6.4
Other participating interests.....do.....	23.3	(D)	(D)	-	(D)	(D)	15.2	1.8	0.3	17.3
Contributors.....do.....	2.6	(D)	(D)	-	(D)	(D)	0.1	(Z)	(Z)	0.1
Undistributed.....do.....	0.3	(D)	(D)	-	(D)	(D)	-	0.1	-	0.1
Wells drilled and completed, except those drilled on contract for others, total:										
Drilled.....number..	1,270	36	12	-	(D)	(D)	56	53	14	123
Footage drilled.....1,000 ft..	4,669	385	118	-	(D)	(D)	552	353	70	975
Cost of drilling and equipping.....million dollars..	46.8	19.5	1.4	-	(D)	(D)	21.2	2.2	0.4	23.8
Oil wells:										
Drilled.....number..	559	(D)	(D)	-	(D)	(D)	22	11	5	38
Footage drilled.....1,000 ft..	1,846	(D)	(D)	-	(D)	(D)	191	68	26	285
Cost of drilling and equipping.....million dollars..	20.9	(D)	(D)	-	(D)	(D)	9.7	0.8	0.3	10.8
Gas and gas condensate wells:										
Drilled.....number..	163	(D)	(D)	-	(D)	(D)	8	3	-	11
Footage drilled.....1,000 ft..	572	(D)	(D)	-	(D)	(D)	116	26	-	142
Cost of drilling and equipping.....million dollars..	9.9	(D)	(D)	-	(D)	(D)	5.4	0.2	-	5.6
Dry holes:										
Drilled.....number..	539	(D)	8	-	-	(D)	26	39	9	74
Footage drilled.....1,000 ft..	2,222	(D)	76	-	-	(D)	245	259	44	548
Cost of drilling and equipping.....million dollars..	15.8	(D)	0.8	-	-	(D)	6.1	1.2	0.1	7.4
Service wells:										
Drilled.....number..	9	-	-	-	-	-	-	-	-	-
Footage drilled.....1,000 ft..	29	-	-	-	-	-	-	-	-	-
Cost of drilling and equipping.....million dollars..	0.2	-	-	-	-	-	-	-	-	-
Wells drilled and completed on contract for others:										
Drilled.....number..	23,447	368	599	669	633	1,482	3,751	1,126	1,844	6,721
Footage drilled.....1,000 ft..	118,297	3,048	5,407	5,305	4,590	9,027	27,377	7,115	10,905	45,397
Cost of drilling and equipping.....million dollars..	538.6	27.5	41.5	47.7	44.2	53.3	214.2	4.2	49.9	268.3

See footnotes at end of table.

TABLE 8A. Detailed Statistics For Operating Companies Ranked By Value of Company Shipments and Receipts: 1967—Continued

Item	Operating companies ranked by value of shipments and receipts--Continued											
	Next 50 (companies 101-150)	Next 50 (companies 151-200)	First 200 companies	Next 50 (com- panies 201-250)	Next 50 (com- panies 251-300)	Next 50 (com- panies 301-350)	Next 50 (com- panies 351-400)	Next 50 (com- panies 401-450)	Next 50 (com- panies 451-500)	Next 300 (com- panies 501-800)	Next 600 (com- panies 801-1400)	All other com- panies
Operating companies.....number..	50	50	200	50	50	50	50	50	50	300	600	4,269
Establishments.....do....	116	99	966	87	95	66	65	75	68	385	682	4,389
Value of shipments and receipts, total..million dollars..	103.7	72.8	1,245.9	59.4	50.3	42.9	37.6	34.6	30.9	136.9	162.2	216.0
Value added in mining.....do....	76.2	54.1	897.4	47.1	38.4	32.3	30.1	27.1	25.8	110.8	131.7	183.5
Total employment.....1,000..	4.7	3.9	51.9	3.4	3.2	2.4	2.4	2.1	2.3	9.4	12.0	17.0
Production, development, exploration workers.....do....	4.2	3.3	41.7	3.1	2.9	2.2	2.2	1.9	2.0	8.5	10.8	15.3
All other employees.....do....	0.5	0.6	10.2	0.3	0.3	0.2	0.2	0.2	0.3	0.9	1.2	1.7
Man-hours worked by production, development, and exploration workers, total.....million..	9.2	7.8	92.3	6.9	5.3	5.0	4.5	4.0	4.2	17.1	21.4	34.8
Operating and maintaining wells.....do....	0.3	0.6	1.4	0.4	0.5	0.1	0.4	0.4	0.3	1.5	1.5	1.4
Drilling wells and rig building.....do....	5.9	4.5	42.1	3.6	1.7	2.3	1.5	1.4	1.2	5.3	5.4	9.7
Exploration work (except drilling).....do....	0.3	0.9	9.5	0.4	0.3	0.2	0.1	0.7	0.6	0.9	1.2	2.8
Other work.....do....	2.7	1.8	39.3	2.5	2.8	2.4	2.5	1.5	2.2	9.4	13.2	20.9
Payroll.....million dollars..	36.7	28.0	407.2	22.9	19.0	16.1	14.5	13.9	12.7	55.0	64.9	80.3
Wages of production, development, and exploration workers.....do....	31.5	23.8	312.5	20.3	16.2	14.2	12.2	11.6	11.2	47.2	55.4	68.2
Salaries of all other employees.....do....	5.2	4.2	94.7	2.8	2.8	1.9	2.3	2.3	1.5	7.7	9.4	12.1
Supplemental labor costs not included in payrolls ² do....	3.5	2.7	45.6	2.3	1.7	1.8	1.7	1.4	1.1	4.8	5.2	4.4
Legally required expenditures, including Social Security contributions.....do....	2.4	2.1	27.7	1.7	1.2	1.5	1.4	1.1	0.8	4.0	4.8	4.2
Payments for voluntary programs.....do....	1.1	0.6	17.8	0.6	0.5	0.3	0.3	0.3	0.3	0.8	0.5	0.2
Total cost of supplies, etc.....do....	38.3	25.9	508.2	20.2	19.7	17.9	11.2	10.8	9.2	39.1	46.1	58.6
Supplies, gas purchased for gas lift and repressuring, purchased machinery installed, and purchases for resale.....do....	29.5	19.9	422.7	15.5	15.8	15.0	8.4	8.8	7.2	29.2	34.5	44.4
Purchased fuel and purchased electric energy.....do....	3.5	2.5	33.5	1.9	1.4	1.5	1.4	1.3	0.9	5.1	5.8	8.2
Subcontract work.....do....	5.3	3.5	52.0	2.8	2.5	1.4	1.4	0.7	1.1	4.8	5.8	6.0
Capital expenditures, total.....do....	10.7	7.2	167.4	7.8	7.7	7.3	3.7	3.3	4.1	13.0	15.6	18.7
Mineral development and exploration.....do....	0.6	1.2	21.7	0.4	0.1	0.4	0.4	0.4	0.5	0.8	1.0	3.2
New structures and additions.....do....	0.7	0.3	10.5	0.1	0.1	0.1	0.2	0.1	0.1	0.4	0.6	0.9
New machinery and equipment.....do....	8.1	4.9	123.8	5.3	6.8	6.4	2.0	2.4	2.4	9.5	10.8	12.6
Used plant and equipment.....do....	1.4	0.8	11.5	2.0	0.7	0.5	1.2	0.4	1.0	2.2	3.1	1.9
Mineral development and exploration expenditures expensed.....do....	4.2	1.9	21.8	0.4	0.2	-	0.3	0.8	0.8	2.6	6.2	1.8
Cost of drilling and equipping wells completed during 1967, total.....do....	4.8	2.4	31.1	0.2	0.3	0.2	0.4	1.1	0.1	0.9	3.0	7.5
Source of funds:												
Operators.....do....	2.2	0.5	9.1	0.1	0.1	0.1	0.3	0.6	0.1	0.4	1.7	6.1
Other participating interests.....do....	1.1	1.2	19.6	0.1	0.2	0.1	0.1	0.4	-	0.5	1.3	1.0
Contributors.....do....	1.4	0.7	2.2	-	(Z)	(Z)	-	(Z)	-	-	(Z)	0.4
Undistributed.....do....	0.1	-	0.2	-	-	-	-	0.1	-	-	-	-
Wells drilled and completed, except those drilled on contract for others, total:												
Drilled.....number..	126	136	385	14	8	9	12	29	8	47	236	522
Footage drilled.....1,000 ft..	547	580	2,102	71	24	64	65	136	27	141	682	1,357
Cost of drilling and equipping.....million dollars..	4.8	4.8	33.4	0.2	0.3	0.2	0.4	1.1	0.1	0.9	3.0	7.2
Oil wells:												
Drilled.....number..	37	69	144	(D)	5	3	(D)	11	(D)	22	100	260
Footage drilled.....1,000 ft..	139	278	702	(D)	15	24	(D)	54	(D)	76	263	642
Cost of drilling and equipping.....million dollars..	0.8	3.4	15.0	(D)	0.2	0.1	(D)	0.5	(D)	0.6	1.1	3.0
Gas and gas condensate wells:												
Drilled.....number..	21	19	51	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)
Footage drilled.....1,000 ft..	89	68	299	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)
Cost of drilling and equipping.....million dollars..	1.4	0.4	7.4	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)
Dry holes:												
Drilled.....number..	73	48	195	11	(D)	6	(D)	18	4	(D)	82	196
Footage drilled.....1,000 ft..	371	234	1,153	63	(D)	40	(D)	82	14	(D)	280	520
Cost of drilling and equipping.....million dollars..	2.3	1.0	10.7	0.2	(D)	0.1	(D)	0.6	0.1	(D)	1.1	2.7
Service wells:												
Drilled.....number..	6	-	6	-	-	-	-	-	-	-	(D)	(D)
Footage drilled.....1,000 ft..	21	-	21	-	-	-	-	-	-	-	(D)	(D)
Cost of drilling and equipping.....million dollars..	0.2	-	0.2	-	-	-	-	-	-	-	(D)	(D)
Wells drilled and completed on contract for others:												
Drilled.....number..	2,473	3,363	12,557	1,687	653	607	617	774	763	2,240	2,279	1,270
Footage drilled.....1,000 ft..	10,646	16,429	72,472	6,972	3,390	3,451	2,642	3,303	3,672	7,715	8,418	6,262
Cost of drilling and equipping.....million dollars..	39.0	30.8	338.1	21.0	14.1	12.8	9.4	9.3	4.3	23.8	26.3	79.5

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than .05 million.

¹Represents figures obtained from establishments primarily performing oil and gas field services. See introductory text for further explanation of activities included in Industry Group 138.

²Excludes supplemental labor costs for employees reported on central administrative office and auxiliary unit report form NC-X6. The wages and salaries paid such employees are included in the "payroll" figures shown above.

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NONMETALLIC MINERALS (EXCEPT FUELS) MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Major Group 14, Nonmetallic Minerals (Except Fuels) Mining. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1411--Dimension Stone	MIC67(1)-14A
1422--Crushed and Broken Limestone	
1423--Crushed and Broken Granite	
1429--Crushed and Broken Stone, Not Elsewhere Classified	
1442--Construction Sand and Gravel	MIC67(1)-14B
1446--Industrial Sand	
1452--Bentonite	
1453--Fire Clay	
1454--Fuller's Earth	MIC67(1)-14C
1455--Kaolin and Ball Clay	
1456--Feldspar	
1459--Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified	
1472--Barite	MIC67(1)-14D
1473--Fluorspar	
1474--Potash, Soda, and Borate Minerals	
1475--Phosphate Rock	
1477--Sulfur	
1479--Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified	
1481--Nonmetallic Minerals (Except Fuels), Services	MIC67(1)-14E
1492--Gypsum	
1493--Mica	
1494--Native Asphalt and Bitumens	
1495--Pumice and Pumicite	
1496--Talc, Soapstone, and Pyrophyllite	
1497--Natural Abrasives (Except Sand)	
1498--Peat	
1499--Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified	

In addition to the industries listed above, separate subindustry figures are presented for the Dimension Limestone, Dimension Granite, Dimension Stone, N.E.C.

INDUSTRY DESCRIPTIONS

The Nonmetallic Minerals Mining Industries represent establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals (except fuels). Also included are certain well and brine operations and primary preparation plants such as those engaged in crushing, grinding, washing, or other concentration.

The manufacture of cement and lime, and the cutting and finishing of stone and stone products (exclusive of associated quarry operations), the manufacture of brick and other structural clay products (including the operation of associated clay pits), and establishments primarily engaged in grinding, pulverizing, or otherwise treating earths, rocks, and minerals, which are not directly associated with the mining activity, are classified in Major Group 32--Stone, Clay, and Glass Products.

SUMMARY OF FINDINGS

The combined value of shipments and receipts for all industries in Major Group 14 was \$2,996.0 million. The value of minerals produced and used in the same establishment or shipped by mines and quarries included in the manufactures census was approximately \$358.8 million. Hence, the approximate total value of products of all nonmetallic minerals (except fuels) operations was \$3,354.8 million. The largest industry in Major Group 14 was Crushed and Broken Stone, with value of shipments and receipts amounting to \$963.6 million. The next largest industry was Chemical and Fertilizer Mineral Industry, with value of shipments and receipts amounting to \$909.6 million. The value of shipments and receipts of the Sand and Gravel Industries was \$715.1 million. Value of shipments and receipts of the Clay and Related Minerals Industries was \$218.1 million; the value of shipments and receipts of the Dimension Stone Industry was \$22.2 million. The value of shipments and receipts of the Miscellaneous Minerals, N.E.C., Industries was \$152.1 million. In addition, mining operations included in manufacturing establishments produced and used or shipped crushed and broken stone valued at about \$151.3 million, dimension stone valued at \$82.1 million, sand and gravel valued at about \$63.8 million, and clay and related minerals valued at about \$36.6 million, and Miscellaneous Nonmetallic Minerals valued at about \$25.0 million.

Table 1 presents comparative general statistics for all nonmetallic mineral mining operations combined for the census years 1880 to 1967. Table 2 presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. Table 3 shows number of establishments, employment, and value added in mining by major types of operation for selected geographic areas. In table 4, detailed statistics are presented for the United States by 4-digit industries and subindustries and for similar mining operations in manufacturing establishments.

COVERAGE

As part of the 1967, 1963, 1958, and 1954 censuses of manufactures, selected separate data were collected on mine or quarry operations at cement, lime, clay products, and gypsum products plants. For dimension stone quarries operated with dressing plants, which are classified in the manufactures census, complete reports for the quarry and dressing plants essentially comparable to those for the minerals census were obtained. The statistics for all these mining operations which are included in the census of manufactures are summarized in this report and included separately in the reports for the related mineral industries. Such inclusion provides statistics more nearly comparable to those available for minerals censuses prior to 1954.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

	Establishments		All employees		Production, development and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts ¹ (million dollars)	Capital expenditures (million dollars)
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
Mineral industries only:											
1967.....	² 6,582	1,559	119.9	812.0	94.8	207.6	588.9	2,288.0	1,080.7	2,996.0	372.7
1963.....	² 8,421	1,486	121.2	661.5	98.4	212.8	502.0	1,744.8	849.7	2,346.9	247.5
1958.....	7,323	1,436	118.6	553.5	96.8	204.9	415.0	1,391.5	679.5	1,881.1	189.8
1954.....	8,081	1,310	113.4	449.9	97.1	214.8	363.7	³ 1,179.8	542.2	³ 1,577.2	145.0
Including operations in manufactures:											
All operations:											
1967.....	² 7,691	1,748	135.9	899.7	109.9	237.8	670.1	2,579.2	1,151.5	3,354.8	375.9
1963.....	² 10,302	1,730	142.7	762.0	118.6	253.6	595.6	2,066.0	941.9	2,756.4	⁴ 251.5
1958.....	8,897	1,686	139.6	640.1	116.6	243.9	494.5	1,691.7	743.5	2,242.9	⁴ 192.3
1954 ⁵	9,298	(NA)	133.7	521.2	116.6	254.4	430.8	³ 1,373.5	591.2	³ 1,817.9	⁴ 146.9
1939 ⁶	⁷ 5,159	(NA)	90.4	104.7	81.3	161.8	83.0	255.7	(NA)	(NA)	(NA)
1929 ⁸ ⁹	4,004	(NA)	106.3	148.3	94.8	(NA)	116.7	318.7	(NA)	(NA)	(NA)
Excluding sand, gravel, common clay, and shale operations and stone quarries operated as parts of cement and lime plants:											
1967.....	3,412	1,117	90.8	609.7	71.8	157.7	438.2	1,797.4	821.9	2,343.3	281.5
1963.....	4,082	1,053	89.9	486.8	73.2	158.1	364.5	1,306.5	634.8	1,768.5	⁴ 172.8
1958.....	3,882	1,037	91.4	418.9	75.1	155.3	312.7	1,032.1	512.8	1,412.1	⁴ 132.8
1954 ⁴	4,310	(NA)	87.3	339.0	76.1	164.3	276.9	³ 916.6	403.4	³ 1,219.3	⁴ 100.8
1939 ⁵	⁶ 2,711	(NA)	60.5	68.1	54.6	120.6	53.6	164.3	(NA)	(NA)	(NA)
1929 ⁷ ⁸	2,694	(NA)	74.2	98.7	66.7	(NA)	78.6	206.9	(NA)	(NA)	(NA)
1919 ⁸ ⁹	2,714	(NA)	69.9	77.7	64.1	(NA)	66.4	120.4	(NA)	165.6	(NA)
1909 ⁸ ¹⁰	4,897	(NA)	107.1	49.0	100.8	(NA)	43.2	86.6	(NA)	106.6	(NA)
1902 ⁸ ¹¹	⁶ 6,640	(NA)	92.2	48.9	¹² 85.6	(NA)	43.2	74.2	(NA)	(NA)	(NA)
1889 ⁸	(NA)	(NA)	90.5	32.8	85.6	(NA)	(NA)	50.8	(NA)	(NA)	(NA)
1880 ⁸	1,684	(NA)	43.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

¹For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment.²In 1967, for the first time data for single unit establishments without employees were excluded from the census. In 1963, there were 1,022 single unit establishments without paid employees in this State. In the 1963 census, these establishments for mining as a whole, accounted for approximately 3 percent of value added.³Excludes figures for Alaska.⁴Excludes data for sand and gravel mining operations in manufacturing establishments. The value of sand and gravel mined and sold or used at such establishments in 1954 was \$22,784 thousand.⁵Except for value of shipments and value added, excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was \$7,913 thousand; this value has been included in the value of shipments and value added in mining.⁶Represents number of mines and quarries and, for mining services operations, number of operating companies.⁷Excludes data for common clay and shale and peat operations. In 1939, there were 609 such mines with products valued at \$6,341 thousand. Also excludes data for 27 nonproducing establishments.⁸Excludes contract service operations.⁹Except for number of establishments, excludes data for 1 gypsum mine and 1 marble mine in Alaska.¹⁰Excludes data for 19 nonproducing establishments.¹¹Includes data for lime plants producing lime valued at \$9,336 thousand. For 1902, data were also obtained from the operators of nonmetallic minerals mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 592.¹²Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added in mining (million dollars)
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
	United States, total.....	6,582	1,559	119.9	812.0	94.8	207.6	588.9	2,288.0	1,080.7	2,996.0	372.7	121.2	1,744.8
141	Dimension stone.....	244	21	1.9	9.3	1.8	3.3	7.6	18.1	5.2	22.1	1.1	2.2	14.8
142	Crushed and broken stone.....	2,033	714	43.0	280.8	35.8	80.7	215.7	704.7	368.4	963.5	109.5	43.2	581.7
144	Sand and gravel.....	3,232	485	34.6	229.2	28.0	59.9	173.7	547.6	261.7	715.0	94.3	40.1	513.7
145	Clay and related minerals.....	356	121	9.3	57.7	7.5	16.5	42.9	154.7	87.7	218.3	24.0	8.3	113.6
147	Chemical and fertilizer minerals	233	130	23.8	118.1	15.9	34.5	113.5	740.8	300.2	909.7	131.3	21.0	433.3
148	Nonmetallic minerals services...	106	10	.8	5.9	.8	1.5	4.9	11.2	5.9	15.3	1.9	.9	9.3
149	Miscellaneous nonmetallic minerals.....	378	78	6.4	41.0	5.2	11.0	30.6	111.2	51.1	151.9	10.2	5.5	78.3
NEW ENGLAND DIVISION														
14	Nonmetallic minerals, except fuels.....	278	50	3.5	23.6	2.9	6.1	17.9	50.3	22.8	67.4	5.6	3.7	42.0
141	Dimension stone.....	22	6	.4	2.2	.4	.7	1.9	4.6	1.4	5.9	.1	.4	3.6
142	Crushed and broken stone.....	48	15	.9	7.6	.6	1.5	5.1	15.3	7.8	21.2	1.9	.9	10.9
144	Sand and gravel.....	183	23	1.6	10.7	1.4	2.9	8.6	22.5	10.6	30.2	2.9	2.0	22.0
145	Clay and related minerals.....	8	2	(CC)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	1.1
149	Miscellaneous nonmetallic minerals.....	13	4	(EE)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Maine:														
14	Nonmetallic minerals, except fuels.....	30	3	(CC)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	1.5
144	Sand and gravel.....	16	2	.1	.5	.1	.2	.4	.7	.3	.9	.1	.1	.9
New Hampshire:														
14	Nonmetallic minerals, except fuels.....	26	3	.2	1.4	.2	.4	1.1	3.3	1.6	4.2	.8	.2	2.2
144	Sand and gravel.....	20	2	.2	.9	.1	.3	.7	2.2	.9	2.6	.5	.2	1.7
Vermont:														
14	Nonmetallic minerals except, fuels.....	35	12	(FF)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.8	8.8
142	Crushed and broken stone....	9	3	.2	1.1	.2	.3	.8	2.3	.9	3.0	.2	.1	1.0
Massachusetts:														
14	Nonmetallic minerals, except fuels.....	101	17	(GG)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.5	16.9
142	Crushed and broken stone....	17	6	.4	3.1	.3	.6	2.0	5.7	3.9	9.0	.7	.4	4.6
144	Sand and gravel.....	77	10	.7	4.8	.5	1.2	3.6	10.2	4.7	13.7	1.2	1.0	11.9
Rhode Island:														
14	Nonmetallic minerals, except fuels.....	21	7	(EE)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	2.0
144	Sand and gravel.....	17	5	(CC)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	1.3
Connecticut:														
142	Crushed and broken stone....	13	4	.3	2.8	.2	.5	2.0	6.3	2.0	7.7	.6	.3	4.1
144	Sand and gravel.....	42	3	(EE)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.4	5.8
MIDDLE ATLANTIC DIVISION														
14	Nonmetallic minerals, except fuels.....	778	196	14.7	111.0	11.0	24.0	72.5	246.8	(D)	327.2	(D)	14.6	202.1
141	Dimension stone.....	40	2	.2	1.0	.2	.4	.9	2.1	.7	2.6	.2	.3	1.5
142	Crushed and broken stone.....	258	110	7.4	55.1	5.8	12.9	39.0	132.1	63.6	179.7	16.2	7.4	109.5
144	Sand and gravel.....	365	60	4.5	31.5	3.6	7.6	23.4	76.4	34.2	99.0	11.6	4.5	61.4
145	Clay and related minerals.....	57	11	(FF)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
147	Chemical and fertilizer minerals.....	11	8	1.3	13.1	.5	1.0	3.4	19.2	4.8	23.0	1.1	1.3	15.9
New York:														
14	Nonmetallic minerals, except fuels.....	294	60	5.4	45.4	3.9	8.5	28.5	92.0	37.8	117.8	12.0	5.4	83.9
142	Crushed and broken stone....	71	29	2.1	18.1	1.6	3.8	13.2	38.8	16.8	50.2	5.4	2.2	36.0
144	Sand and gravel.....	179	16	1.5	11.0	1.3	2.6	8.5	25.2	12.1	32.8	4.5	1.7	23.5
149	Miscellaneous nonmetallic minerals.....	19	4	.5	3.5	.4	.8	2.5	6.6	2.8	8.8	.6	.5	7.8
New Jersey:														
14	Nonmetallic minerals, except fuels.....	126	42	(HH)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.0	46.0
142	Crushed and broken stone....	25	18	1.1	9.3	.8	1.9	5.9	24.1	(D)	31.1	(D)	1.5	25.2
144	Sand and gravel.....	86	20	1.2	8.7	1.0	2.1	6.1	21.9	11.7	29.5	4.1	1.4	19.8

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	MIDDLE ATLANTIC DIVISION--Continued													
	Pennsylvania:													
14	Nonmetallic minerals, except fuels.....	358	94	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.1	72.3
141	Dimension stone.....	35	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	.9
142	Crushed and broken stone....	162	63	4.2	27.7	3.4	7.3	19.9	69.2	(D)	98.4	(D)	3.7	48.4
144	Sand and gravel.....	100	24	1.7	11.8	1.4	3.0	8.9	29.3	10.4	36.7	3.0	1.5	18.1
145	Clay and related minerals...	41	4	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	3.8
	EAST NORTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	1,497	277	21.5	156.1	16.7	36.5	111.0	372.7	163.9	476.1	60.4	21.7	290.8
141	Dimension stone.....	55	6	.6	2.9	.5	1.0	2.3	5.6	1.3	6.6	.4	.4	3.1
142	Crushed and broken stone....	431	129	9.0	64.1	7.4	16.5	49.4	166.6	75.9	216.2	26.3	9.3	130.4
144	Sand and gravel.....	889	112	8.6	60.9	6.8	14.6	46.0	150.1	64.2	190.3	23.9	9.0	123.6
145	Clay and related minerals....	44	13	.8	5.9	.6	1.3	4.1	10.5	7.8	15.0	3.1	.6	7.1
147	Chemical and fertilizer minerals.....	19	8	1.9	18.5	.9	2.1	6.4	30.3	10.6	35.9	5.0	1.8	18.3
148	Nonmetallic minerals services.	18	1	.1	.8	.1	.2	.7	1.3	.7	1.7	.3	.1	.5
149	Miscellaneous nonmetallic minerals.....	41	8	.5	3.1	.4	.9	2.0	8.4	3.3	10.4	1.4	.5	7.8
	Ohio:													
14	Nonmetallic minerals, except fuels.....	448	87	6.0	40.5	4.9	10.7	30.5	107.9	48.6	136.2	20.3	(NA)	(NA)
142	Crushed and broken stone....	115	38	2.6	17.5	2.1	4.7	12.7	42.8	24.1	56.9	10.0	2.7	35.6
144	Sand and gravel.....	278	41	2.5	16.9	2.1	4.4	13.1	42.7	16.6	54.1	5.1	2.5	37.1
145	Clay and related minerals...	24	6	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	4.1
	Indiana:													
14	Nonmetallic minerals, except fuels.....	232	51	3.1	20.2	2.5	5.6	15.3	51.1	22.6	64.9	8.8	2.8	36.3
141	Dimension stone.....	13	5	.3	1.9	.3	.6	1.5	3.5	.7	4.1	.2	.2	2.0
142	Crushed and broken stone....	77	28	1.5	10.2	1.2	2.8	7.7	26.9	12.1	34.1	4.9	1.4	17.0
144	Sand and gravel.....	129	15	1.1	7.3	.9	1.9	5.4	19.0	8.7	24.3	3.4	1.2	16.0
	Illinois:													
14	Nonmetallic minerals, except fuels.....	340	80	6.3	51.0	4.3	9.6	30.5	102.1	46.4	132.7	15.6	(NA)	(NA)
142	Crushed and broken stone....	147	42	2.5	18.8	2.1	4.7	14.5	54.4	20.7	69.7	5.3	2.5	38.4
144	Sand and gravel.....	151	25	1.9	14.4	1.5	3.3	11.1	34.0	15.4	43.0	6.4	2.2	27.3
145	Clay and related minerals...	13	5	.4	3.1	.3	.6	2.0	3.7	4.0	5.3	2.3	.2	2.1
	Michigan:													
14	Nonmetallic minerals, except fuels.....	255	38	3.9	28.6	3.3	6.9	23.0	77.0	29.5	96.9	9.5	3.9	63.3
142	Crushed and broken stone....	28	7	1.5	11.1	1.3	2.6	9.3	29.4	11.3	36.7	4.0	1.4	23.3
144	Sand and gravel.....	199	25	1.9	13.9	1.5	3.2	10.6	34.4	14.7	44.2	4.9	1.9	28.0
	Wisconsin:													
14	Nonmetallic minerals, except fuels.....	222	21	2.2	15.6	1.7	3.7	11.8	34.7	16.9	45.4	6.2	2.8	32.0
141	Dimension stone.....	20	1	.1	.7	.1	.3	.6	1.2	.4	1.5	.1	.1	.7
142	Crushed and broken stone....	64	14	.9	6.5	.8	1.7	5.3	13.2	7.7	18.9	2.1	1.4	16.1
144	Sand and gravel.....	132	6	1.1	8.3	.8	1.7	5.9	20.0	8.8	24.7	4.0	1.2	15.1
	WEST NORTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	1,039	163	10.9	67.3	9.1	19.8	52.5	153.0	82.4	211.4	23.9	11.6	131.4
141	Dimension stone.....	21	-	.1	.5	.1	.2	.4	.9	.3	1.1	.1	.2	1.4
142	Crushed and broken stone....	406	99	5.7	36.6	4.8	10.8	28.7	81.3	47.5	114.4	14.5	5.7	64.6
144	Sand and gravel.....	521	46	3.8	23.2	3.2	6.7	18.5	50.6	26.9	69.6	7.9	4.6	50.3
145	Clay and related minerals....	43	6	.4	2.5	.3	.7	1.9	10.1	3.9	13.3	.7	.4	6.8
147	Chemical and fertilizer minerals.....	15	8	.6	3.2	.5	1.0	2.3	7.4	2.9	9.8	.5	.5	(D)
148	Nonmetallic minerals services.	19	-	.1	.3	.1	.1	.3	.7	.4	1.0	.2	.1	1.3
149	Miscellaneous nonmetallic minerals.....	14	4	.2	1.0	.1	.2	.4	1.9	.5	2.3	.1	.1	(D)
	Minnesota:													
14	Nonmetallic minerals, except fuels.....	162	26	1.7	11.6	1.3	2.6	8.3	21.4	10.6	29.0	3.0	(NA)	16.9
142	Crushed and broken stone....	30	9	.5	3.5	.4	.8	2.6	6.6	2.9	8.7	.9	.4	4.2
144	Sand and gravel.....	115	14	1.1	7.1	.8	1.6	5.2	13.8	7.1	18.8	2.1	1.2	11.5

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	WEST NORTH CENTRAL DIVISION--Continued													
	Iowa:													
14	Nonmetallic minerals, except fuels.....	214	39	2.6	16.9	2.1	5.2	12.9	40.4	23.2	57.1	6.5	2.4	29.7
142	Crushed and broken stone.....	117	30	1.9	12.7	1.5	3.9	9.4	30.5	17.6	43.0	5.1	1.6	20.5
144	Sand and gravel.....	90	8	.6	3.9	.6	1.3	3.3	9.2	5.3	13.1	1.3	.7	8.8
	Missouri:													
14	Nonmetallic minerals, except fuels.....	294	56	3.5	20.9	3.1	6.3	17.1	49.3	27.5	68.5	8.3	3.9	46.1
142	Crushed and broken stone.....	162	40	2.2	13.8	1.9	4.0	11.3	27.5	18.8	40.3	6.1	2.5	27.1
144	Sand and gravel.....	69	8	.6	3.5	.1	1.0	2.9	8.3	3.7	10.7	1.3	.7	9.8
145	Clay and related minerals....	29	2	.1	.8	.1	.3	.7	5.9	1.9	7.5	.4	(NA)	(NA)
147	Chemical and fertilizer minerals.....	11	5	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.4	3.7
148	Nonmetallic minerals services.....	15	-	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	1.2
	North Dakota:													
14	Nonmetallic minerals, except fuels.....	27	3	3.3	1.6	.2	.5	1.4	3.7	2.5	5.4	.8	(NA)	(NA)
144	Sand and gravel.....	25	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	2.6
	South Dakota:													
14	Nonmetallic minerals, except fuels.....	52	6	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel.....	36	1	.2	1.0	.1	.3	.8	2.0	1.7	3.0	.7	.3	2.5
145	Clay and related minerals....	4	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	3.0
	Nebraska:													
14	Nonmetallic minerals, except fuels.....	140	14	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
142	Crushed and broken stone.....	22	5	.3	1.7	.2	.6	1.5	3.8	2.5	5.8	.6	(NA)	(NA)
144	Sand and gravel.....	111	8	.7	3.7	.5	1.1	2.9	7.8	4.2	11.0	1.0	.9	8.7
	Kansas:													
14	Nonmetallic minerals, except fuels.....	150	19	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.6	17.4
142	Crushed and broken stone.....	65	12	.6	3.7	.6	1.2	3.1	10.6	4.3	13.5	1.4	.8	9.0
144	Sand and gravel.....	75	4	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.6	6.5
	SOUTH ATLANTIC DIVISION													
14	Nonmetallic minerals, except fuels.....	810	322	24.9	144.3	20.5	46.3	109.1	450.0	285.7	646.1	90.1	22.5	311.4
141	Dimension stone.....	31	3	.3	1.2	.3	.5	1.0	2.3	.8	2.9	.2	.3	1.4
142	Crushed and broken stone.....	336	181	9.4	52.4	8.1	18.7	41.0	141.5	86.4	203.2	24.7	9.0	119.7
144	Sand and gravel.....	246	50	3.7	21.7	3.0	6.9	15.8	50.4	25.6	67.4	8.6	4.4	51.9
145	Clay and related minerals.....	73	45	4.8	26.9	4.0	8.7	21.0	81.1	47.5	113.1	15.5	4.2	59.3
147	Chemical and fertilizer minerals.....	42	28	5.5	36.2	4.1	9.3	25.6	160.0	120.4	240.1	40.2	3.6	69.9
148	Nonmetallic minerals services.....	13	1	.1	.5	.1	.1	.4	.9	.3	1.2	.1	.1	.8
	Delaware, Maryland, and District of Columbia:													
14	Nonmetallic minerals, except fuels.....	100	26	1.8	11.3	1.5	3.4	8.5	30.8	19.9	45.9	4.8	1.9	30.8
142	Crushed and broken stone.....	31	12	.8	5.0	.7	1.6	3.9	15.7	10.8	24.5	2.1	.8	13.3
144	Sand and gravel.....	52	11	.8	5.4	.6	1.5	3.9	12.6	7.4	17.4	2.6	1.1	15.9
	Virginia:													
14	Nonmetallic minerals, except fuels.....	143	69	3.4	17.9	2.9	6.4	14.1	44.3	23.0	60.6	6.8	3.7	41.5
142	Crushed and broken stone.....	86	50	2.1	11.0	1.8	3.9	8.5	28.8	16.3	40.0	5.0	2.3	28.8
144	Sand and gravel.....	40	11	.7	4.2	.7	1.5	3.4	8.6	4.6	11.6	1.5	.8	8.4
145	Clay and related minerals.....	7	5	.2	1.2	.2	.4	.8	3.8	1.3	4.9	.2	.2	2.1
	West Virginia:													
14	Nonmetallic minerals, except fuels.....	50	18	1.2	7.9	.9	1.9	5.4	15.8	7.7	20.8	2.6	1.3	16.4
142	Crushed and broken stone.....	37	12	.7	4.2	.6	1.2	3.3	8.6	5.0	11.8	1.8	.6	7.0
144	Sand and gravel.....	11	6	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.7	9.1

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	SOUTH ATLANTIC DIVISION--Continued													
	North Carolina:													
142	Crushed and broken stone....	74	37	1.7	8.9	1.4	3.4	7.0	28.5	16.8	40.2	5.1	1.1	16.5
144	Sand and gravel.....	35	7	.5	2.6	.4	1.0	2.1	6.6	2.8	7.9	1.5	.5	6.2
145	Clay and related minerals...	13	6	.3	1.6	.3	.7	1.4	4.0	2.9	6.5	.3	.3	3.2
149	Miscellaneous nonmetallic minerals.....	25	6	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	South Carolina:													
142	Crushed and broken stone....	14	10	.6	3.0	.5	1.1	2.5	7.0	6.5	11.0	2.5	.7	9.3
144	Sand and gravel.....	28	7	.5	2.4	.4	.9	1.8	5.8	3.2	8.2	.9	.3	3.4
145	Clay and related minerals...	7	6	.4	2.3	.4	.8	1.8	5.4	(D)	8.4	(D)	.5	4.8
149	Miscellaneous nonmetallic minerals.....	4	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	1.3
	Georgia:													
14	Nonmetallic minerals, except fuels.....	141	64	6.0	33.9	5.0	11.5	26.7	102.7	58.5	141.0	20.3	5.5	74.4
141	Dimension stone.....	11	-	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	.6
142	Crushed and broken stone....	40	34	2.0	11.0	1.7	4.2	8.9	32.9	18.3	45.3	5.8	1.8	23.2
144	Sand and gravel.....	36	3	.3	1.3	.3	.6	1.1	3.8	1.7	5.1	.4	.4	3.0
145	Clay and related minerals...	37	23	3.4	19.9	2.7	6.0	15.3	60.6	35.8	83.1	13.4	3.0	44.4
149	Miscellaneous nonmetallic minerals.....	9	2	.1	.4	.1	.2	.3	1.2	.6	1.7	.1	(D)	(D)
	Florida:													
14	Nonmetallic minerals, except fuels.....	163	61	7.4	46.1	5.8	13.4	33.6	189.0	133.6	279.3	43.3	5.9	98.2
142	Crushed and broken stone....	55	26	1.6	9.1	1.3	3.3	6.9	20.0	12.8	30.4	2.3	1.7	21.7
144	Sand and gravel.....	44	5	.4	2.2	.3	.7	1.7	6.0	3.4	8.4	1.0	.6	5.9
145	Clay and related minerals...	5	3	.3	1.6	.3	.7	1.3	5.7	2.8	7.4	1.1	.3	3.8
147	Chemical and fertilizer minerals.....	31	23	4.8	31.4	3.6	8.1	22.2	152.6	113.1	227.1	38.6	3.2	66.1
148	Nonmetallic minerals services.....	7	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	.4
	EAST SOUTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	479	158	8.8	48.9	7.5	16.6	38.6	142.3	71.0	192.2	21.1	9.7	127.1
141	Dimension stone.....	18	4	.2	.9	.2	.3	.6	.9	.3	1.2	(Z)	.2	1.0
142	Crushed and broken stone....	209	89	4.6	25.3	4.0	9.0	20.1	69.6	36.9	94.6	11.9	4.6	63.2
144	Sand and gravel.....	169	33	2.1	11.0	1.7	3.8	8.3	27.4	13.9	36.5	4.9	2.3	23.2
145	Clay and related minerals....	43	18	.9	5.2	.7	1.6	4.1	17.0	7.7	22.8	1.9	.8	11.1
147	Chemical and fertilizer minerals.....	26	9	.7	4.8	.6	1.3	4.1	21.9	10.5	30.5	2.0	1.6	26.2
148	Nonmetallic minerals services.....	5	1	.1	.5	.1	.1	.4	1.3	.5	1.7	.1	.1	1.0
149	Miscellaneous nonmetallic minerals.....	9	4	.2	1.3	.2	.4	1.0	4.2	1.2	5.0	.3	.1	1.4
	Kentucky:													
14	Nonmetallic minerals, except fuels.....	139	57	2.9	16.0	2.4	5.2	12.3	41.4	21.5	54.8	8.1	3.0	40.1
142	Crushed and broken stone....	101	44	2.1	11.3	1.7	3.9	8.7	30.0	15.0	39.2	5.8	2.2	30.1
144	Sand and gravel.....	21	6	.4	2.4	.3	.7	1.8	7.4	3.1	9.1	1.4	.4	5.4
145	Clay and related minerals...	6	3	.1	1.0	.1	.3	.7	3.1	1.2	4.0	.3	.2	2.6
	Tennessee:													
14	Nonmetallic minerals, except fuels.....	182	57	3.3	18.4	2.8	6.2	14.5	61.5	28.4	83.0	6.9	4.1	59.7
142	Crushed and broken stone....	79	32	1.5	8.3	1.3	3.1	6.7	25.5	13.2	35.3	3.4	1.5	21.6
144	Sand and gravel.....	55	9	.6	3.4	.5	1.1	2.5	7.8	3.7	10.2	1.3	.7	7.6
145	Clay and related minerals...	11	7	.3	1.9	.3	.6	1.4	5.1	2.4	6.9	.7	.3	4.3
	Alabama:													
14	Nonmetallic minerals, except fuels.....	100	31	1.9	10.3	1.7	3.6	8.7	28.5	14.4	38.5	4.4	1.8	19.4
142	Crushed and broken stone....	28	13	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	11.4
144	Sand and gravel.....	49	10	.5	2.2	.4	.9	1.9	5.5	2.7	7.5	.7	.6	5.3
145	Clay and related minerals...	15	3	.1	1.2	.1	.3	1.0	4.7	1.9	6.0	.6	.1	1.2
	Mississippi:													
14	Nonmetallic minerals, except fuels.....	58	13	.8	4.2	.7	1.5	3.1	10.9	6.7	15.9	1.7	.9	8.0
144	Sand and gravel.....	44	8	.5	3.0	.4	1.0	2.2	6.7	4.4	9.6	1.5	.7	4.9

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	WEST SOUTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	559	192	13.5	87.2	10.7	24.2	62.3	418.6	141.5	505.8	54.3	12.8	221.7
141	Dimension stone.....	11	-	.1	.2	.1	.1	.1	.5	.1	.6	(Z)	.2	1.3
142	Crushed and broken stone.....	94	51	3.2	18.2	2.7	6.3	14.3	45.4	26.5	65.3	6.6	3.0	37.4
144	Sand and gravel.....	346	84	4.4	24.6	3.9	8.8	19.7	61.4	37.3	84.4	14.3	4.5	47.7
145	Clay and related minerals.....	21	7	.4	2.3	.3	.7	1.7	5.8	3.0	8.5	.3	.4	23.1
147	Chemical and fertilizer minerals.....	43	34	4.3	35.1	3.0	6.6	21.8	288.8	61.8	319.2	31.4	4.2	126.4
149	Miscellaneous nonmetallic minerals.....	34	15	1.1	6.6	.8	1.8	4.4	16.3	12.6	27.3	1.5	.5	4.7
	Arkansas:													
14	Nonmetallic minerals, except fuels.....	75	25	1.8	10.2	1.6	3.4	8.5	27.5	(D)	42.5	(D)	1.8	23.8
144	Sand and gravel.....	38	10	.5	2.8	.5	1.1	2.4	7.5	(D)	10.4	(D)	.5	4.5
	Louisiana:													
14	Nonmetallic minerals, except fuels.....	104	48	4.2	29.5	3.2	6.9	19.9	203.2	54.2	226.6	30.8	3.3	82.8
144	Sand and gravel.....	76	28	1.3	6.5	1.2	2.5	5.6	18.0	7.7	23.1	2.7	1.2	12.1
147	Chemical and fertilizer minerals.....	18	14	GG	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.0	69.5
	Oklahoma:													
14	Nonmetallic minerals, except fuels.....	70	21	1.0	5.4	.9	2.0	4.5	14.2	(D)	19.4	(D)	1.3	15.0
142	Crushed and broken stone....	27	13	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.8	8.7
144	Sand and gravel.....	33	7	.3	1.5	.3	.6	1.3	3.7	(D)	5.4	(D)	.4	5.1
	Texas:													
14	Nonmetallic minerals, except fuels.....	310	98	6.4	42.2	5.1	12.0	29.4	173.7	62.9	217.3	19.3	6.4	100.1
142	Crushed and broken stone....	41	25	1.6	9.3	1.3	3.2	6.6	20.3	11.3	27.1	4.5	1.3	13.8
144	Sand and gravel.....	199	39	2.3	13.8	1.9	4.6	10.3	32.1	23.1	45.5	9.7	2.4	25.9
145	Clay and related minerals...	14	6	.2	1.3	.2	.4	.9	3.2	1.8	4.8	.2	.3	2.6
149	Miscellaneous nonmetallic minerals.....	19	10	.6	3.3	.5	1.2	2.5	6.6	6.3	11.9	1.0	.4	3.7
	MOUNTAIN DIVISION													
14	Nonmetallic minerals, except fuels.....	446	73	10.3	76.6	8.3	16.8	59.2	196.4	98.9	252.0	43.2	10.7	180.5
142	Crushed and broken stone.....	63	8	.5	3.6	.5	1.0	3.1	8.4	3.5	11.2	.7	.6	7.8
144	Sand and gravel.....	175	11	1.3	8.4	1.1	2.1	6.9	19.0	7.5	24.2	2.3	2.4	28.2
145	Clay and related minerals.....	36	13	.9	6.5	.8	1.7	5.3	15.4	9.9	24.2	1.0	.8	12.0
147	Chemical and fertilizer minerals.....	56	25	6.3	49.8	4.7	9.8	36.8	132.2	68.2	164.2	36.1	5.4	113.1
1481	Nonmetallic minerals services.	17	4	.2	1.8	.2	.5	1.6	3.4	2.0	4.6	.8	.3	3.6
149	Miscellaneous nonmetallic minerals.....	81	12	1.0	6.2	.9	1.7	5.2	17.7	7.7	23.2	2.3	1.0	15.3
	Montana:													
14	Nonmetallic minerals, except fuels.....	48	8	1.0	6.8	.9	1.7	5.9	11.9	5.1	16.2	.8	.9	(²)
144	Sand and gravel.....	21	-	.1	.4	.1	.1	.4	1.0	.5	1.5	.1	.2	2.0
147	Chemical and fertilizer minerals.....	6	4	.6	4.3	.5	1.0	3.7	6.8	2.9	9.6	.1	.5	4.6
149	Miscellaneous nonmetallic minerals.....	10	3	.2	1.5	.2	.5	1.4	3.0	1.3	4.0	.3	.2	2.3
	Idaho:													
14	Nonmetallic minerals, except fuels.....	41	8	.7	5.0	.6	1.1	3.8	14.3	13.0	19.4	7.9	.5	8.8
144	Sand and gravel.....	11	1	.1	.3	(Z)	.1	.3	1.1	.2	.9	.3	.1	1.1
	Wyoming:													
14	Nonmetallic minerals, except fuels.....	37	14	1.4	10.2	1.0	2.3	7.5	38.6	19.9	48.1	10.4	1.3	24.9
142	Crushed and broken stone....	5	1	.1	.5	.1	.2	.5	1.1	.3	1.3	.1	.1	1.3

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	MOUNTAIN DIVISION--Continued													
	Colorado:													
14	Nonmetallic minerals, except fuels.....	93	8	.7	4.8	.7	1.2	3.9	11.1	5.1	14.9	1.3	1.2	13.5
142	Crushed and broken stone....	14	3	.1	.9	.1	.3	.7	2.0	1.4	3.3	.2	.1	1.4
144	Sand and gravel.....	47	3	.4	2.8	.3	.6	2.3	6.7	2.5	8.4	.8	.6	8.1
145	Clay and related minerals...	9	1	.1	.5	.1	.1	.4	1.0	(D)	1.5	(D)	.1	1.4
149	Miscellaneous nonmetallic minerals.....	12	-	.1	.3	.1	.1	.2	.8	.3	.9	.2	.1	1.4
	New Mexico:													
14	Nonmetallic minerals, except fuels.....	56	12	3.9	31.0	2.9	5.9	22.5	73.8	35.7	104.6	4.8	4.2	89.2
144	Sand and gravel.....	24	1	.1	.5	.1	.2	.4	1.4	.6	1.8	.2	.3	3.4
147	Chemical and fertilizer minerals.....	12	9	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.6	81.7
149	Miscellaneous nonmetallic minerals.....	14	2	.1	.7	.1	.2	.6	3.8	.9	4.4	.3	.1	2.0
	Arizona:													
14	Nonmetallic minerals, except fuels.....	61	4	.6	3.3	.5	.9	2.7	6.6	2.7	8.4	.9	.9	9.8
142	Crushed and broken stone....	13	1	.1	.5	.1	.1	.5	1.2	.4	1.5	.1	.1	1.4
144	Sand and gravel.....	28	2	.3	2.1	.3	.6	1.8	4.1	1.7	5.2	.6	.6	6.2
149	Miscellaneous nonmetallic minerals.....	13	1	.1	.4	.1	.1	.4	1.0	.3	1.3	.1	.2	1.8
	Utah:													
14	Nonmetallic minerals, except fuels.....	66	12	1.4	10.0	1.1	2.4	8.3	24.9	10.8	20.1	15.6	1.2	² 23.3
142	Crushed and broken stone....	7	1	.1	.6	.1	.2	.5	1.8	.5	2.1	.2	.1	2.1
144	Sand and gravel.....	20	1	.1	.7	.1	.2	.5	1.1	.7	1.7	.1	.3	3.8
145	Clay and related minerals...	10	1	.1	1.2	.1	.3	1.1	1.6	(D)	2.0	(D)	.2	1.1
	Nevada:													
14	Nonmetallic minerals, except fuels.....	44	7	.7	5.5	.6	1.3	4.6	15.2	6.6	20.3	1.5	.6	11.0
144	Sand and gravel.....	16	3	.2	1.4	.2	.3	1.2	3.4	1.2	4.3	.2	.2	2.0
147	Chemical and fertilizer minerals.....	12	-	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	.8
149	Miscellaneous nonmetallic minerals.....	8	3	.2	1.5	.1	.4	1.2	5.4	(D)	6.9	(D)	.2	3.8
	PACIFIC DIVISION													
14	Nonmetallic minerals, except fuels.....	697	128	11.9	97.5	8.5	17.3	66.1	258.0	103.1	318.2	43.1	14.0	237.8
141	Dimension stone.....	28	-	.1	.3	.1	.1	.3	.8	.2	1.0	.1	.1	1.2
142	Crushed and broken stone....	188	33	2.3	18.0	2.0	4.0	15.1	45.3	20.2	58.8	6.8	2.7	38.0
144	Sand and gravel.....	338	66	4.6	37.4	3.3	6.5	26.5	89.8	41.6	113.6	17.8	6.5	105.4
145	Clay and related minerals....	30	5	.3	2.2	.3	.6	1.8	4.6	3.2	7.2	.5	.5	7.0
147	Chemical and fertilizer minerals.....	21	10	3.1	27.5	1.6	3.4	13.0	80.9	21.0	87.0	14.9	2.8	58.3
148	Nonmetallic minerals services.	13	1	.1	.8	.1	.2	.8	1.5	1.2	2.4	.3	.1	1.5
149	Miscellaneous nonmetallic minerals.....	79	13	1.4	11.3	1.2	2.4	8.6	35.1	15.7	48.2	2.6	1.3	26.4
	Washington:													
14	Nonmetallic minerals, except fuels.....	122	11	1.0	8.1	.8	1.5	5.9	15.6	9.1	21.2	3.6	1.0	(D)
142	Crushed and broken stone....	31	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	4.2
144	Sand and gravel.....	61	7	.6	4.5	.5	1.0	3.9	9.3	5.7	13.1	2.0	.5	7.7
	Oregon:													
14	Nonmetallic minerals, except fuels.....	132	17	1.2	8.1	1.0	2.1	7.1	19.0	9.9	26.4	2.6	1.8	(D)
142	Crushed and broken stone....	61	12	.6	4.2	.6	1.1	3.6	10.3	4.9	14.1	1.1	.6	5.1
144	Sand and gravel.....	57	5	.5	3.4	.4	.8	3.0	7.6	4.3	10.7	1.3	1.1	10.2

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group ¹ and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	PACIFIC DIVISION--Continued													
	California:													
14	Nonmetallic minerals, except fuel.....	424	96	9.4	79.4	6.5	13.2	51.5	216.0	81.2	262.3	34.8	10.7	199.9
142	Crushed and broken stone....	89	16	1.2	10.9	1.1	2.2	9.0	27.0	10.7	34.8	2.8	1.5	24.6
144	Sand and gravel.....	212	53	3.5	28.9	2.3	4.6	19.1	70.6	31.1	87.5	14.3	4.8	86.1
145	Clay and related minerals...	25	5	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	4.4
147	Chemical and fertilizer minerals.....	17	9	HH	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.8	58.3
148	Nonmetallic minerals service	6	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	.7
149	Miscellaneous nonmetallic minerals.....	57	12	1.3	10.7	1.1	2.3	8.0	33.3	14.9	45.8	2.4	1.2	24.9
	Alaska:													
14	Nonmetallic minerals, except fuels.....	7	1	.1	.3	(Z)	.1	.3	2.1	.6	2.4	.3	.1	1.0
	Hawaii:													
14	Nonmetallic minerals, except fuels.....	12	3	.2	1.6	.2	.4	1.3	5.0	2.3	5.5	1.8	.3	4.9
142	Crushed and broken stone....	5	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	4.1

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (Z) Less than \$50 thousand or 50 employees.

¹Industry groups with less than 50 employees are omitted. They are included, however, in higher-level totals. For industries and industry groups with 50 or more employees which cannot be shown because they would disclose figures for individual companies, the number of establishments is shown and the employment size range is indicated by one of the following symbols:

BB - 50-99 employees
CC - 100-249 employees

EE - 250-499 employees
FF - 500- 999 employees

GG - 1,000-2,499 employees
HH - 2,500 and over employees

²Figures for Montana are included with Utah.

TABLE 2B. General Statistics for Mining Operations at Manufacturing Establishments, by Industry Groups and Geographic Areas: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Industry group and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts ²	Capital expenditures ³	All employees ¹	Value added in mining
		Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
14	Nonmetallic minerals, except fuels.....	1,109	189	16.0	87.7	15.1	30.2	81.2	291.2	70.8	358.8	3.2	21.4	321.2
141	Dimension stone.....	122	74	7.2	38.1	6.3	13.0	31.6	62.4	22.9	82.1	3.2	8.8	56.1
142	Crushed and broken stone.....	241	78	4.5	26.7	4.5	8.9	26.7	122.6	28.7	151.3	(NA)	5.9	123.9
144	Sand and gravel.....	333	27	2.5	13.9	2.5	4.8	13.9	54.7	9.1	63.8	(NA)	2.9	69.0
145	Clay and related minerals.....	379	3	1.4	6.1	1.4	2.6	6.1	28.5	8.1	36.6	(NA)	3.1	46.4
149	Miscellaneous nonmetallic minerals.....	34	7	0.5	2.9	0.5	1.0	2.9	23.0	2.0	25.0	(NA)	0.7	25.9
NEW ENGLAND DIVISION														
14	Nonmetallic minerals, except fuels.....	68	13	1.8	10.3	1.6	3.4	8.6	18.7	7.2	25.3	³ 0.6	2.5	25.2
141	Dimension stone.....	22	13	1.6	9.1	1.4	3.0	7.5	13.5	5.8	18.8	0.6	1.9	12.9
142	Crushed and broken stone.....	8	-	0.1	0.4	0.1	0.1	0.4	2.3	0.9	3.2	(NA)	0.4	8.6
144	Sand and gravel.....	27	-	0.1	0.6	0.1	0.2	0.6	2.6	0.2	2.8	(NA)	0.1	3.2
145	Clay and related minerals.....	11	-	(Z)	0.2	(Z)	0.1	0.2	0.3	0.2	0.5	(NA)	(Z)	(⁴)
14	Maine (Nonmetallic minerals, except fuels).....	12	2	0.2	0.9	0.2	0.3	0.8	1.7	0.7	2.4	(NA)	0.3	2.2
Vermont:														
14	Nonmetallic minerals, except fuels.....	15	7	1.1	5.3	1.0	2.0	4.8	8.4	3.5	11.5	³ 0.3	1.2	7.6
141	Dimension stone.....	12	7	1.0	5.2	0.9	2.0	4.7	7.7	3.4	10.8	0.3	(NA)	(NA)
Massachusetts:														
14	Nonmetallic minerals, except fuels.....	26	3	0.5	3.0	0.4	0.8	2.3	5.5	1.8	7.2	(NA)	0.6	8.4
142	Crushed and broken stone....	4	-	(Z)	0.2	(Z)	0.1	0.2	0.7	0.3	1.0	(NA)	0.1	3.1
144	Sand and gravel.....	12	-	(Z)	0.2	(Z)	0.1	0.2	1.0	0.1	1.1	(NA)	0.1	2.0
14	Rhode Island (Nonmetallic minerals, except fuels) (sand and gravel).....	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.4	(Z)	0.4	(NA)	(NA)	(NA)
MIDDLE ATLANTIC DIVISION														
14	Nonmetallic minerals, except fuels.....	140	23	2.0	10.7	1.9	3.8	10.3	32.7	8.3	40.8	³ 0.2	2.9	46.2
141	Dimension stone.....	22	10	0.7	3.5	0.6	1.3	3.1	4.8	1.5	6.1	0.2	0.7	4.1
142	Crushed and broken stone.....	38	16	0.9	5.1	0.9	1.8	5.1	17.6	5.1	22.8	(NA)	1.2	21.9
144	Sand and gravel.....	33	1	0.2	0.8	0.2	0.3	0.8	6.0	0.7	6.7	(NA)	0.4	9.0
145	Clay and related minerals.....	43	-	0.2	0.8	0.2	0.3	0.8	2.6	0.6	3.2	(NA)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals.....	4	1	0.1	0.5	0.1	0.2	0.5	1.6	0.4	2.0	(NA)	(NA)	(NA)
New York:														
14	Nonmetallic minerals, except fuels.....	50	7	0.5	3.0	0.5	1.0	2.9	11.1	2.7	13.8	(NA)	0.8	12.0
142	Crushed and broken stone....	8	4	0.1	1.0	0.1	0.3	1.0	3.4	1.4	4.7	(NA)	0.2	3.8
144	Sand and gravel.....	22	-	0.1	0.5	0.1	0.2	0.5	4.6	0.5	5.1	(NA)	0.2	4.7
149	Miscellaneous nonmetallic minerals.....	4	1	0.1	0.5	0.1	0.2	0.5	1.6	0.4	2.0	(NA)	(NA)	(NA)
New Jersey (Nonmetallic minerals, except fuels).....														
		9	-	(Z)	0.2	(Z)	0.1	0.2	0.7	0.1	0.8	(NA)	0.3	4.2
Pennsylvania:														
14	Nonmetallic minerals, except fuels.....	81	21	1.4	7.5	1.4	2.8	7.2	20.9	5.4	26.2	(NA)	1.8	30.0
142	Crushed and broken stone....	30	12	0.8	4.0	0.8	1.5	4.0	14.3	3.8	18.1	(NA)	0.7	16.1
145	Clay and related minerals...	32	-	0.1	0.6	0.1	0.3	0.6	2.1	0.5	2.6	(NA)	0.4	7.8
EAST NORTH CENTRAL DIVISION														
14	Nonmetallic minerals, except fuels.....	220	34	2.9	17.0	2.8	5.5	15.9	54.4	13.1	66.5	³ 1.0	4.4	63.6
141	Dimension stone.....	24	12	1.3	7.4	1.1	2.2	6.2	12.9	3.6	15.6	1.0	2.0	13.7
142	Crushed and broken stone....	38	14	0.7	4.7	0.7	1.4	4.7	21.6	5.1	26.7	(NA)	.9	19.6
144	Sand and gravel.....	61	5	0.5	2.6	0.5	1.0	2.6	10.5	1.6	12.1	(NA)	0.5	11.9
145	Clay and related minerals...	91	-	0.3	1.6	0.3	0.6	1.6	4.7	2.3	6.9	(NA)	0.8	13.3
149	Miscellaneous nonmetallic minerals.....	6	3	0.1	0.8	0.1	0.3	0.8	4.7	0.5	5.2	(NA)	0.1	5.0

See footnotes at end of table.

TABLE 2B. General Statistics for Mining Operations at Manufacturing Establishments, by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts ²	Capital expenditures ³	All employees ¹	Value added in mining
		Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	EAST NORTH CENTRAL DIVISION--Continued													
	Ohio:													
14	Nonmetallic minerals, except fuels.....	85	12	0.9	4.8	0.8	1.7	4.7	15.9	(D)	20.4	(D)	1.6	23.2
142	Crushed and broken stone....	16	8	0.3	1.9	0.3	0.6	1.9	7.2	2.1	9.3	(NA)	0.5	8.5
144	Sand and gravel.....	12	1	0.1	0.4	0.1	0.2	0.4	1.9	0.2	2.1	(NA)	0.1	2.1
145	Clay and related minerals...	53	-	0.2	1.0	0.2	0.4	1.0	2.8	1.6	4.4	(NA)	0.5	7.8
	Indiana:													
14	Nonmetallic minerals, except fuels.....	38	12	1.0	5.9	1.0	1.8	5.1	14.6	3.4	17.7	³ 0.3	1.4	15.8
141	Dimension stone.....	10	8	0.8	4.8	0.7	1.4	4.0	8.0	2.1	9.7	0.3	1.2	7.6
	Illinois:													
14	Nonmetallic minerals, except fuels.....	36	2	0.3	1.8	0.3	0.5	1.8	5.6	(D)	7.3	(D)	0.6	11.0
142	Crushed and broken stone....	6	2	0.1	1.0	0.1	0.3	1.0	3.1	1.0	4.1	(NA)	0.2	4.4
145	Clay and related minerals...	20	-	0.1	0.4	0.1	0.1	0.4	1.0	0.5	1.5	(NA)	(NA)	(NA)
	Michigan:													
14	Nonmetallic minerals, except fuels.....	25	4	0.4	2.5	0.4	0.8	2.5	12.5	1.8	14.3	(NA)	0.3	9.7
142	Crushed and broken stone....	4	2	0.2	1.2	0.2	0.3	1.2	7.9	1.0	8.9	(NA)	0.1	5.1
	Wisconsin:													
14	Nonmetallic minerals, except fuels.....	36	4	0.3	2.1	0.3	0.6	1.8	5.8	1.3	6.8	³ 0.3	0.4	3.9
144	Sand and gravel.....	16	2	0.1	0.6	0.1	0.2	0.6	3.1	0.4	3.5	(NA)	0.1	1.5
	WEST NORTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	130	24	2.1	12.5	1.9	4.1	10.9	41.5	8.6	49.6	³ 0.5	2.3	37.2
141	Dimension stone.....	12	10	1.1	6.6	0.9	2.0	5.0	11.9	4.1	15.4	0.5	1.1	8.6
142	Crushed and broken stone....	26	9	0.6	3.5	0.6	1.1	3.5	18.3	2.8	21.1	(NA)	0.7	14.7
144	Sand and gravel.....	50	4	0.3	1.7	0.3	0.6	1.7	3.8	0.6	4.4	(NA)	0.1	3.5
145	Clay and related minerals....	35	-	0.1	0.4	0.1	0.2	0.4	1.7	0.8	2.5	(NA)	0.3	4.1
149	Miscellaneous nonmetallic minerals.....	7	1	0.1	0.4	0.1	0.2	0.4	5.9	0.3	6.2	(NA)	0.1	6.4
	Minnesota:													
14	Nonmetallic minerals, except fuels.....	28	6	0.5	3.3	0.4	0.9	2.5	7.4	1.5	8.9	³ 0.1	0.4	5.3
141	Dimension stone.....	5	5	0.4	2.8	0.3	0.7	2.0	5.6	1.1	6.7	0.1	0.4	4.0
144	Sand and gravel.....	19	1	0.1	0.5	0.1	0.2	0.5	1.5	0.3	1.8	(NA)	(Z)	1.2
	Iowa:													
14	Nonmetallic minerals, except fuels.....	35	6	0.3	1.8	0.3	0.7	1.8	9.9	1.7	11.5	(NA)	0.3	8.8
142	Crushed and broken stone....	6	4	0.1	0.9	0.1	0.3	0.9	4.0	1.0	5.0	(NA)	(NA)	(NA)
145	Clay and related minerals...	15	-	(Z)	0.2	(Z)	0.1	0.2	0.3	0.3	0.6	(NA)	0.1	0.8
	Missouri:													
14	Nonmetallic minerals, except fuels.....	24	6	0.8	4.7	0.8	1.6	4.0	13.7	(D)	17.2	(D)	1.0	14.6
142	Crushed and broken stone....	10	3	0.3	1.8	0.3	0.6	1.8	9.1	1.3	10.4	(NA)	0.3	8.5
	Nebraska (Nonmetallic minerals, except fuels).....	12	1	0.1	0.3	0.1	0.1	0.3	1.6	0.2	1.8	(NA)	0.1	1.3
	Kansas:													
14	Nonmetallic minerals, except fuels.....	24	3	0.3	1.5	0.3	0.5	1.5	6.8	0.9	7.7	(NA)	0.3	5.3

See footnotes at end of table.

TABLE 2B. General Statistics for Mining Operations at Manufacturing Establishments, by Industry Groups and Geographic Areas: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Industry group and geographic area	1967											1963	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts ²	Capital expenditures ³	All employees ¹	Value added in mining
		Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	SOUTH ATLANTIC DIVISION													
14	Nonmetallic minerals, except fuels.....	128	34	2.8	12.7	2.7	5.3	11.7	42.7	9.9	51.9	³ 0.7	3.2	33.5
141	Dimension stone.....	23	17	1.8	7.6	1.6	3.2	6.5	12.7	4.3	16.3	0.7	1.8	9.6
142	Crushed and broken stone.....	22	12	0.5	2.8	0.5	1.0	2.8	14.9	3.1	18.0	(NA)	0.6	12.1
145	Clay and related minerals.....	74	1	0.3	1.3	0.3	0.6	1.3	11.1	1.4	12.4	(NA)	(NA)	(NA)
	Maryland:													
14	Nonmetallic minerals, except fuels.....	15	5	0.2	1.1	0.2	0.4	1.0	5.6	1.0	6.6	(NA)	(NA)	(NA)
142	Crushed and broken stone....	4	2	0.1	0.5	0.1	0.2	0.5	2.3	0.4	2.8	(NA)	0.2	1.9
144	Sand and gravel.....	3	2	0.1	0.4	0.1	0.2	0.4	2.6	0.4	3.0	(NA)	0.1	1.3
	Virginia:													
14	Nonmetallic minerals, except fuels.....	25	9	0.6	2.6	0.6	1.2	2.5	8.3	(D)	10.0	(D)	0.6	6.9
142	Crushed and broken stone....	8	5	0.2	1.0	0.2	0.4	1.0	3.8	1.0	4.8	(NA)	0.2	3.1
145	Clay and related minerals...	12	-	(Z)	0.1	(Z)	0.1	0.1	1.0	0.2	1.2	(NA)	(NA)	(NA)
	North Carolina:													
14	Nonmetallic minerals, except fuels.....	29	3	0.5	2.0	0.5	0.9	1.8	6.1	1.5	7.6	(NA)	(D)	(D)
145	Clay and related minerals...	24	-	0.1	0.4	0.1	0.2	0.4	3.1	0.5	3.6	(Z)	0.1	1.5
14	South Carolina (Nonmetallic minerals, except fuels).....	15	1	0.1	0.5	0.1	0.2	0.5	5.5	0.3	5.8	(NA)	(D)	(D)
	Georgia:													
14	Nonmetallic minerals, except fuels.....	30	14	1.3	5.7	1.2	2.3	5.0	10.6	3.8	14.1	³ 0.4	1.3	8.1
141	Dimension stone.....	17	12	1.1	5.2	1.0	2.1	4.5	8.0	3.3	10.9	0.4	1.2	6.9
14	Florida (Nonmetallic minerals, except fuels).....	5	1	0.1	0.3	0.1	0.1	0.3	4.1	0.6	4.8	(NA)	0.2	5.5
	EAST SOUTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	62	10	0.8	4.1	0.8	1.5	4.0	16.0	(D)	20.1	(D)	1.5	16.0
142	Crushed and broken stone.....	22	6	0.3	1.9	0.3	0.7	1.9	8.7	2.2	10.9	(NA)	0.4	8.4
14	Kentucky (Nonmetallic minerals, except fuels).....	10	-	(Z)	0.2	(Z)	0.1	0.2	1.5	0.2	1.7	(NA)	0.1	2.3
14	Tennessee (Nonmetallic minerals, except fuels).....	12	3	0.3	1.4	0.2	0.5	1.3	5.2	(D)	5.9	(D)	0.7	4.6
	Alabama:													
14	Nonmetallic minerals, except fuels.....	28	6	0.4	2.1	0.4	0.8	2.0	8.2	2.1	10.3	(NA)	0.6	7.7
142	Crushed and broken stone....	11	3	0.2	0.9	0.2	0.4	0.9	4.5	1.3	5.8	(NA)	0.2	4.3
14	Mississippi (Nonmetallic minerals, except fuels).....	12	1	0.1	0.4	0.1	0.2	0.4	1.1	1.1	2.2	(NA)	0.1	1.4
	WEST SOUTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels.....	116	20	1.2	5.9	1.2	2.4	5.6	28.7	8.3	36.9	³ 0.1	1.4	27.8
142	Crushed and broken stone.....	28	9	0.5	2.4	0.5	0.9	2.4	14.5	4.0	18.5	(NA)	0.4	11.9
144	Sand and gravel.....	16	2	0.2	0.8	0.2	0.3	0.8	2.8	0.4	3.2	(NA)	0.2	3.9
	Arkansas:													
14	Nonmetallic minerals, except fuels.....	13	1	0.1	0.5	0.1	0.2	0.5	4.3	0.6	4.9	(NA)	0.2	3.7
142	Crushed and broken stone....	3	1	0.1	0.2	0.1	0.1	0.2	3.1	0.2	3.3	(NA)	(NA)	(NA)
14	Louisiana (Nonmetallic minerals, except fuels).....	12	3	0.1	0.8	0.1	0.3	0.8	0.9	1.5	2.5	(NA)	(Z)	0.5
	Oklahoma:													
14	Nonmetallic minerals, except fuels.....	19	4	0.2	0.8	0.2	0.4	0.8	5.6	1.0	6.6	(NA)	0.2	4.3
145	Clay and related minerals...	9	-	(Z)	0.1	(Z)	0.1	0.1	0.4	0.1	0.5	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for Mining Operations at Manufacturing Establishments, by Industry Groups and Geographic Areas: 1967 and 1963-Continued

(See appendix, Explanation of Terms)

	Industry group and geographic area	1967										1963		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts ²	Capital expenditures ³	All employees ¹	Value added in mining
		Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	WEST SOUTH CENTRAL DIVISION--Continued													
	Texas:													
14	Nonmetallic minerals, except fuels.....	72	12	0.8	3.8	0.8	1.5	3.5	17.8	5.1	22.9	³ 0.1	1.0	19.2
141	Dimension stone.....	4	4	0.2	1.1	0.2	0.4	0.8	1.7	1.6	3.2	0.1	0.2	1.7
142	Crushed and broken stone...	20	6	0.3	1.5	0.3	0.6	1.5	8.9	2.4	11.3	(NA)	0.3	8.2
144	Sand and gravel.....	9	1	0.1	0.5	0.1	0.2	0.5	1.8	0.2	2.0	(NA)	0.1	3.0
145	Clay and related minerals..	34	1	0.1	0.5	0.1	0.3	0.5	1.9	0.7	2.6	(NA)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals.....	5	-	(Z)	0.2	(Z)	0.1	0.2	3.6	0.2	3.7	(NA)	(NA)	(NA)
	MOUNTAIN DIVISION													
14	Nonmetallic minerals, except fuels.....	111	5	0.8	4.8	0.8	1.5	4.8	19.3	(D)	23.7	(D)	1.1	27.9
142	Crushed and broken stone....	26	1	0.2	1.3	0.2	0.5	1.3	6.7	1.4	8.1	(NA)	0.3	7.3
144	Sand and gravel.....	67	4	0.5	3.0	0.5	0.9	3.0	9.7	2.6	12.3	(NA)	0.6	15.2
14	Montana (Nonmetallic minerals, except fuels).....	12	-	(Z)	0.3	(Z)	0.1	0.3	1.5	0.2	1.7	(NA)	(Z)	1.1
14	Idaho (Nonmetallic minerals, except fuels).....	12	-	(Z)	0.2	(Z)	0.1	0.2	0.7	(D)	0.9	(D)	0.1	2.2
14	Wyoming (Nonmetallic minerals, except fuels).....	8	-	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.1	0.3	(NA)	(Z)	0.7
14	Colorado (Nonmetallic minerals, except fuels).....	21	-	0.1	0.5	0.1	0.2	0.5	2.8	0.4	3.2	(NA)	0.2	4.1
	New Mexico:													
14	Nonmetallic minerals, except fuels.....	10	1	0.1	0.4	0.1	0.1	0.4	1.8	0.4	2.2	(NA)	0.1	3.7
144	Sand and gravel.....	4	1	(Z)	0.2	(Z)	0.1	0.2	0.6	0.3	0.9	(NA)	0.1	2.5
	Arizona:													
14	Nonmetallic minerals, except fuels.....	26	2	0.3	1.6	0.3	0.6	1.6	6.3	2.3	8.7	(NA)	0.3	8.4
142	Crushed and broken stone...	8	-	0.1	0.4	0.1	0.2	0.4	1.4	0.7	2.1	(NA)	0.1	1.9
144	Sand and gravel.....	15	2	0.2	1.1	0.2	0.4	1.1	4.7	1.6	6.3	(NA)	0.2	5.7
	Utah:													
14	Nonmetallic minerals, except fuels.....	15	2	0.1	1.2	0.1	0.3	1.2	3.4	0.5	3.9	(NA)	0.1	2.8
144	Sand and gravel.....	9	1	0.1	1.0	0.1	0.2	1.0	1.6	0.3	1.9	(NA)	(Z)	0.7
14	Nevada (Nonmetallic minerals, except fuels).....	7	-	0.1	0.5	0.1	0.1	0.5	2.5	0.3	2.8	(NA)	0.2	5.1
	PACIFIC DIVISION													
14	Nonmetallic minerals, except fuels.....	134	21	1.4	9.6	1.4	2.7	9.4	37.2	6.9	44.1	³ 0.1	2.2	43.9
142	Crushed and broken stone....	33	11	0.7	4.6	0.7	1.3	4.6	17.9	4.1	22.0	(NA)	0.9	18.8
144	Sand and gravel.....	69	7	0.5	3.6	0.5	1.0	3.6	14.6	1.7	16.2	(NA)	0.7	16.4
145	Clay and related minerals....	25	-	(Z)	0.2	(Z)	0.1	0.2	1.0	0.3	1.3	(NA)	(NA)	(NA)
	Washington:													
14	Nonmetallic minerals, except fuels.....	33	2	0.2	1.6	0.2	0.4	1.5	5.9	0.8	6.8	(NA)	0.3	4.8
144	Sand and gravel.....	22	1	0.1	0.9	0.1	0.3	0.9	3.6	0.4	4.0	(NA)	0.1	2.9
	Oregon:													
14	Nonmetallic minerals, except fuels.....	21	2	0.1	1.0	0.1	0.3	1.0	4.0	0.3	4.3	(NA)	0.1	3.7
144	Sand and gravel.....	11	2	0.1	0.9	0.1	0.2	0.9	3.4	0.2	3.6	(NA)	(NA)	(NA)
	California:													
14	Nonmetallic minerals, except fuels.....	70	15	0.9	6.3	0.9	1.8	6.1	24.4	5.2	29.5	(NA)	1.7	34.4
142	Crushed and broken stone...	18	8	0.5	3.5	0.5	1.0	3.5	13.4	3.2	16.6	(NA)	0.8	15.7
144	Sand and gravel.....	31	4	0.3	1.5	0.3	0.5	1.5	6.8	1.1	7.9	(NA)	0.4	10.5

Note: Detail may not add to the total due to independent rounding.

Standard Notes: -Represents zero. (D) Withheld to avoid disclosing figures of individual companies. (NA) Not available. (Z) Less than one-half of the unit of measure specified.

¹For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are included for all employees as for production, development, and exploration workers.²Value of shipments and receipts, includes the estimated value of mineral products produced and used in the same establishments.³Represents capital expenditures for the dimension stone industry only.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments											Nonproducing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed ¹	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	United States:													
	Establishments.....number..	6,582	6,529	850	46	766	38	3,985	128	3,556	301	114	1,580	53
	Employees.....1,000..	119.9	119.4	8.1	0.9	4.7	2.3	96.6	9.7	78.4	8.6	2.1	12.4	0.4
	Value added in mining..mil.dol..	2,288.0	2,275.5	340.3	17.4	72.4	250.6	1,797.2	202.0	1,436.4	158.9	57.3	80.7	12.6
141	Dimension stone:													
	Establishments.....number..	244	244	207	-	207	-	34	1	33	-	-	3	-
	Employees.....1,000..	1.9	1.9	1.3	-	1.3	-	0.5	(D)	(D)	-	-	(Z)	-
	Value added in mining..mil.dol..	18.1	18.1	13.5	-	13.5	-	4.7	(D)	(D)	-	-	-	-
142	Crushed and broken stone:													
	Establishments.....number..	2,033	2,016	61	5	55	1	1,866	72	1,775	19	35	54	17
	Employees.....1,000..	43.0	42.8	0.6	(D)	0.6	(D)	40.5	1.9	37.6	1.0	0.4	1.2	0.1
	Value added in mining..mil.dol..	704.7	704.0	12.6	(D)	10.4	(D)	683.7	30.7	641.9	11.1	7.7	-	0.7
144	Sand and gravel:													
	Establishments.....number..	3,232	3,213	221	-	199	22	1,584	-	1,330	254	54	1,354	19
	Employees.....1,000..	34.6	34.4	1.4	-	1.2	0.2	26.3	-	21.9	4.4	0.7	6.1	0.1
	Value added in mining..mil.dol..	547.6	547.3	22.4	-	18.9	3.6	449.2	-	374.9	74.3	9.4	66.3	0.3
145	Clay and related minerals:													
	Establishments.....number..	356	350	178	5	171	2	161	2	158	1	-	11	6
	Employees.....1,000..	9.3	(D)	1.0	(D)	0.8	(D)	7.7	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	154.7	(D)	20.8	(D)	18.9	(D)	133.1	(D)	(D)	(D)	-	(D)	(D)
147	Chemical and fertilizer minerals:													
	Establishments.....number..	233	224	62	15	36	11	108	33	58	17	23	31	9
	Employees.....1,000..	23.7	23.7	3.0	(D)	0.4	(D)	16.3	6.8	6.8	2.7	(D)	(D)	0.1
	Value added in mining..mil.dol..	740.8	729.8	261.3	(D)	6.1	(D)	428.2	157.6	208.7	62.0	(D)	(D)	10.9
148	Nonmetallic minerals services:													
	Establishments.....number..	106	106	-	-	-	-	-	-	-	-	-	106	-
	Employees.....1,000..	0.8	0.8	-	-	-	-	-	-	-	-	-	0.8	-
	Value added in mining..mil.dol..	11.2	11.2	-	-	-	-	-	-	-	-	-	11.2	-
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	378	376	121	21	98	2	232	20	202	10	2	21	2
	Employees.....1,000..	6.4	(D)	0.8	(D)	0.4	(D)	5.3	(D)	3.9	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	111.1	(D)	9.8	(D)	4.6	(D)	98.4	(D)	74.1	(D)	(D)	(D)	(D)
	NEW ENGLAND DIVISION													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	277	276	40	-	39	1	137	3	132	2	4	95	1
	Employees.....1,000..	3.5	(D)	(D)	-	(D)	(D)	2.3	(D)	2.2	(D)	0.1	0.6	(D)
	Value added in mining..mil.dol..	50.3	(D)	(D)	-	(D)	(D)	35.7	(D)	33.5	(D)	1.1	7.1	(D)
141	Dimension stone:													
	Establishments.....number..	22	22	19	-	19	-	3	-	3	-	-	-	-
	Employees.....1,000..	0.4	0.4	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	4.6	4.6	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
142	Crushed and broken stone:													
	Establishments.....number..	48	47	2	-	2	-	43	-	43	-	-	2	1
	Employees.....1,000..	0.9	(D)	(D)	-	(D)	-	0.7	-	0.7	-	-	(D)	(D)
	Value added in mining..mil.dol..	15.3	(D)	(D)	-	(D)	-	13.4	-	13.4	-	-	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	183	183	12	-	11	1	78	-	77	1	4	89	-
	Employees.....1,000..	1.6	1.6	0.1	-	(D)	(D)	1.0	-	(D)	(D)	0.1	0.6	-
	Value added in mining..mil.dol..	22.5	22.5	1.0	-	(D)	(D)	13.5	-	(D)	(D)	1.1	6.9	-
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	13	13	2	-	2	-	10	3	7	-	-	1	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	(D)	(D)	0.2	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	(D)	(D)	3.1	-	-	(D)	-
14	New Hampshire:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	26	26	4	-	4	-	11	-	10	1	1	10	-
	Employees.....1,000..	0.2	0.2	(D)	-	(D)	-	0.1	-	(D)	(D)	(D)	0.1	-
	Value added in mining..mil.dol..	3.3	3.3	(D)	-	(D)	-	1.6	-	(D)	(D)	(D)	1.3	-
144	Sand and gravel:													
	Establishments.....number..	20	20	2	-	2	-	7	-	7	-	1	10	-
	Employees.....1,000..	0.2	0.2	(D)	-	(D)	-	(D)	-	(D)	-	(D)	0.1	-
	Value added in mining..mil.dol..	2.2	2.2	(D)	-	(D)	-	(D)	-	(D)	-	(D)	1.3	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
NEW ENGLAND DIVISION--Con.														
Vermont:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	35	35	7	-	7	-	18	3	15	-	-	10	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	0.5	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	7.1	(D)	(D)	-	-	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	9	9	1	-	1	-	8	-	8	-	-	-	-
	Employees.....1,000..	0.2	0.2	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	2.3	2.3	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	11	11	-	-	-	-	2	-	2	-	-	9	-
	Employees.....1,000..	0.1	0.1	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	1.0	1.0	-	-	-	-	(D)	-	(D)	-	-	(D)	-
Massachusetts:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	101	101	10	-	10	-	58	-	57	1	3	30	-
	Employees.....1,000..	(D)	(D)	0.1	-	0.1	-	0.9	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	1.0	-	1.0	-	13.5	-	(D)	(D)	(D)	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	17	17	-	-	-	-	16	-	16	-	-	1	-
	Employees.....1,000..	0.4	0.4	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	5.7	5.7	-	-	-	-	(D)	-	(D)	-	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	77	77	6	-	6	-	39	-	38	1	3	29	-
	Employees.....1,000..	0.7	0.7	(Z)	-	(Z)	-	0.5	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	10.2	10.2	0.7	-	0.7	-	7.1	-	(D)	(D)	(D)	(D)	-
Rhode Island:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	21	21	1	-	1	-	11	-	11	-	-	9	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	0.2	-	0.2	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	2.5	-	2.5	-	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	17	17	-	-	-	-	9	-	9	-	-	8	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
Connecticut:														
144	Sand and gravel:													
	Establishments.....number..	42	42	4	-	3	1	16	-	16	-	-	22	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	(D)	0.2	-	0.2	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	(D)	3.0	-	3.0	-	-	(D)	-
MIDDLE ATLANTIC DIVISION														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	778	773	132	4	127	1	458	11	420	27	10	173	5
	Employees.....1,000..	14.7	(D)	0.8	(D)	0.7	(D)	11.4	0.9	9.6	0.9	(D)	2.3	(D)
	Value added in mining..mil.dol..	246.8	(D)	14.2	(D)	12.2	(D)	220.2	25.9	176.6	17.8	(D)	9.5	(D)
142	Crushed and broken stone:													
	Establishments.....number..	258	257	3	1	2	-	235	4	230	1	3	16	1
	Employees.....1,000..	7.4	(D)	(D)	(D)	(D)	-	6.8	(D)	6.6	(D)	(D)	0.4	(D)
	Value added in mining..mil.dol..	132.1	(D)	(D)	(D)	(D)	-	129.8	(D)	124.4	(D)	(D)	-	(D)
144	Sand and gravel:													
	Establishments.....number..	365	362	38	-	37	1	185	-	159	26	5	134	3
	Employees.....1,000..	4.5	(D)	0.2	-	(D)	(D)	3.3	-	(D)	(D)	(D)	0.8	(D)
	Value added in mining..mil.dol..	76.4	(D)	4.8	-	(D)	(D)	62.3	-	(D)	(D)	(D)	7.9	(D)
147	Chemical and fertilizer minerals:													
	Establishments.....number..	11	11	-	-	-	-	3	3	-	-	2	6	-
	Employees.....1,000..	1.3	1.3	-	-	-	-	(D)	(D)	-	-	(D)	0.7	-
	Value added in mining..mil.dol..	19.2	19.2	-	-	-	-	(D)	(D)	-	-	(D)	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
MIDDLE ATLANTIC DIVISION--Con.														
14	New York:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	294	293	33	2	31	-	168	6	153	9	2	90	1
	Employees.....1,000..	5.4	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	1.3	(D)
	Value added in mining..mil.dol..	92.0	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	6.8	(D)
142	Crushed and broken stone:													
	Establishments.....number..	71	71	-	-	-	-	66	-	66	-	1	4	-
	Employees.....1,000..	2.1	2.1	-	-	-	-	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining..mil.dol..	38.8	38.8	-	-	-	-	(D)	-	(D)	-	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	179	178	19	-	19	-	88	-	79	9	1	70	1
	Employees.....1,000..	1.5	(D)	(D)	-	(D)	-	0.8	-	(D)	(D)	(D)	0.5	(D)
	Value added in mining..mil.dol..	25.2	(D)	(D)	-	(D)	-	17.1	-	(D)	(D)	(D)	5.6	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	19	19	9	2	7	-	7	3	4	-	-	3	-
	Employees.....1,000..	0.5	0.5	0.1	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	6.6	6.6	0.8	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	-
14	New Jersey:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	126	124	19	-	19	-	67	1	60	6	3	35	2
	Employees.....1,000..	(D)	2.6	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	(D)	47.0	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	25	25	-	-	-	-	21	1	20	-	-	4	-
	Employees.....1,000..	1.1	1.1	-	-	-	-	(D)	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	24.1	24.1	-	-	-	-	(D)	(D)	(D)	-	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	86	85	12	-	12	-	43	-	37	6	3	27	1
	Employees.....1,000..	1.2	(D)	(D)	-	(D)	-	1.0	-	(D)	(D)	(D)	0.1	(D)
	Value added in mining..mil.dol..	21.9	(D)	(D)	-	(D)	-	18.4	-	(D)	(D)	(D)	1.0	(D)
14	Pennsylvania:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	358	356	80	2	77	1	223	4	207	12	5	48	2
	Employees.....1,000..	(D)	6.8	0.5	(D)	(D)	(D)	5.6	(D)	(D)	0.7	0.1	(D)	(D)
	Value added in mining..mil.dol..	(D)	107.7	9.6	(D)	(D)	(D)	95.8	(D)	(D)	14.0	0.9	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	162	161	3	1	2	-	148	3	144	1	2	8	1
	Employees.....1,000..	4.2	(D)	(D)	(D)	(D)	-	3.9	(D)	3.7	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	69.2	(D)	(D)	(D)	(D)	-	67.2	(D)	63.2	(D)	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	100	99	7	-	6	1	54	-	43	11	1	37	1
	Employees.....1,000..	1.7	(D)	(D)	-	(D)	(D)	1.5	-	(D)	(D)	(D)	0.2	(D)
	Value added in mining..mil.dol..	29.3	(D)	(D)	-	(D)	(D)	26.7	-	(D)	(D)	(D)	1.3	(D)
145	Clay and related minerals:													
	Establishments.....number..	41	41	34	1	33	-	7	1	6	-	-	-	-
	Employees.....1,000..	(D)	(D)	0.2	(D)	(D)	-	(D)	(D)	(D)	-	-	-	-
	Value added in mining..mil.dol..	(D)	(D)	5.3	(D)	(D)	-	(D)	(D)	(D)	-	-	-	-
EAST NORTH CENTRAL DIVISION														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	1,497	1,486	162	6	147	9	893	21	824	48	29	402	11
	Employees.....1,000..	21.5	(D)	1.0	(D)	0.9	(D)	17.1	1.3	14.9	0.8	(D)	3.0	(D)
	Value added in mining..mil.dol..	372.7	(D)	15.2	(D)	13.4	(D)	334.7	34.2	285.0	15.5	(D)	17.1	(D)
142	Crushed and broken stone:													
	Establishments.....number..	431	427	7	-	7	-	397	13	379	5	10	13	4
	Employees.....1,000..	9.0	(D)	0.2	-	0.2	-	8.4	0.4	7.8	0.3	(D)	0.3	(D)
	Value added in mining..mil.dol..	166.6	(D)	2.8	-	2.8	-	162.2	5.5	153.4	3.3	(D)	-	(D)

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments											Non-producing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed ¹	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
14	EAST NORTH CENTRAL DIVISION--Con. Nonmetallic minerals, except fuels--Continued													
144	Sand and gravel:													
	Establishments.....number..	889	883	63	-	55	8	443	-	400	43	16	361	6
	Employees.....1,000..	8.6	8.5	0.4	-	0.3	0.1	6.6	-	6.1	0.5	0.1	1.4	0.1
	Value added in mining..mil.dol..	150.1	149.8	6.8	-	5.2	1.6	125.5	-	113.2	12.3	1.6	15.9	0.2
145	Clay and related minerals:													
	Establishments.....number..	44	44	26	-	26	-	15	-	15	-	-	3	-
	Employees.....1,000..	0.8	0.8	0.3	-	3	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	10.5	10.5	1.6	-	1.6	-	(D)	-	(D)	-	-	(D)	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	19	18	9	8	1	-	6	6	-	-	1	2	1
	Employees.....1,000..	1.9	(D)	(Z)	(D)	(D)	-	(D)	(D)	-	-	(D)	(D)	(D)
	Value added in mining..mil.dol..	30.3	(D)	0.1	(D)	(D)	-	(D)	(D)	-	-	(D)	(D)	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	41	41	15	-	14	1	22	2	20	-	-	4	-
	Employees.....1,000..	0.5	0.5	(Z)	-	(D)	(D)	0.3	(D)	(D)	-	-	0.1	-
	Value added in mining..mil.dol..	8.4	8.4	0.5	-	(D)	(D)	7.9	(D)	(D)	-	-	-	-
142	Ohio:													
	Crushed and broken stone:													
	Establishments.....number..	115	113	4	-	4	-	101	2	98	1	4	4	2
	Employees.....1,000..	2.6	(D)	(D)	-	(D)	-	2.3	(D)	(D)	(D)	(Z)	(D)	(D)
	Value added in mining..mil.dol..	42.8	(D)	(D)	-	(D)	-	39.3	(D)	(D)	(D)	1.1	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	278	274	24	-	20	4	137	-	121	16	4	109	4
	Employees.....1,000..	2.5	(D)	(D)	-	(D)	(D)	1.9	-	(D)	(D)	(D)	0.5	(D)
	Value added in mining..mil.dol..	42.7	(D)	(D)	-	(D)	(D)	34.7	-	(D)	(D)	(D)	4.8	(D)
145	Clay and related minerals:													
	Establishments.....number..	24	24	16	-	16	-	7	-	7	-	-	1	-
	Employees.....1,000..	(D)	(D)	0.1	-	0.1	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	1.1	-	1.1	-	(D)	-	(D)	-	-	(D)	-
14	Indiana:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	232	232	29	1	28	-	140	1	128	11	3	60	-
	Employees.....1,000..	3.1	3.1	0.3	(D)	(D)	-	(D)	(D)	(D)	0.1	(D)	(D)	-
	Value added in mining..mil.dol..	51.1	51.1	3.5	(D)	(D)	-	(D)	(D)	(D)	2.0	(D)	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	77	77	1	-	1	-	70	1	67	2	2	4	-
	Employees.....1,000..	1.5	1.5	(D)	-	(D)	-	1.4	(D)	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	26.9	26.9	(D)	-	(D)	-	26.7	(D)	(D)	(D)	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	129	129	10	-	10	-	66	-	57	9	1	52	-
	Employees.....1,000..	1.1	1.1	(D)	-	(D)	-	0.9	-	(D)	(D)	(D)	0.2	-
	Value added in mining..mil.dol..	19.0	19.0	(D)	-	(D)	-	16.3	-	(D)	(D)	(D)	1.7	-
142	Illinois:													
	Crushed and broken stone:													
	Establishments.....number..	147	146	1	-	1	-	140	9	129	2	1	4	1
	Employees.....1,000..	2.5	(D)	(D)	-	(D)	-	2.4	(D)	2.1	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	54.4	(D)	(D)	-	(D)	-	54.1	(D)	48.9	(D)	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	151	151	13	-	9	4	80	-	70	10	4	54	-
	Employees.....1,000..	1.9	1.9	0.1	-	(Z)	0.1	1.6	-	1.5	0.1	(Z)	0.2	-
	Value added in mining..mil.dol..	34.0	34.0	1.6	-	0.6	1.1	30.0	-	27.5	2.6	0.3	2.0	-
14	Michigan:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	255	253	25	-	24	1	128	2	119	7	5	95	2
	Employees.....1,000..	3.9	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	0.2	(D)	0.5	(D)
	Value added in mining..mil.dol..	77.0	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	5.6	(D)	4.8	(D)
142	Crushed and broken stone:													
	Establishments.....number..	28	28	-	-	-	-	26	1	25	-	1	1	-
	Employees.....1,000..	1.5	1.5	-	-	-	-	(D)	(D)	(D)	-	(D)	(D)	-
	Value added in mining..mil.dol..	29.4	29.4	-	-	-	-	(D)	(D)	(D)	-	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	199	197	12	-	12	-	89	-	82	7	4	92	2
	Employees.....1,000..	1.9	(D)	0.1	-	0.1	-	1.4	-	1.2	0.2	(D)	(D)	(D)
	Value added in mining..mil.dol..	34.4	(D)	1.7	-	1.7	-	27.7	-	22.1	5.6	(D)	(D)	(D)

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
EAST NORTH CENTRAL DIVISION--Con.														
Wisconsin:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	222	221	21	-	21	-	138	-	137	1	5	57	1
	Employees.....1,000..	2.2	(D)	(D)	-	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	34.7	(D)	(D)	-	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	64	63	1	-	1	-	60	-	60	-	2	-	1
	Employees.....1,000..	0.9	(D)	(D)	-	(D)	-	(D)	-	(D)	-	(D)	-	(D)
	Value added in mining..mil.dol..	13.2	(D)	(D)	-	(D)	-	(D)	-	(D)	-	(D)	-	(D)
144	Sand and gravel:													
	Establishments.....number..	132	132	4	-	4	-	71	-	70	1	3	54	-
	Employees.....1,000..	1.1	1.1	(Z)	-	(Z)	-	(D)	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	20.0	20.0	0.3	-	0.3	-	(D)	-	(D)	(D)	(D)	(D)	-
WEST NORTH CENTRAL DIVISION														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	1,039	1,036	111	-	107	4	629	25	547	57	6	290	3
	Employees.....1,000..	10.9	(D)	0.7	-	0.6	0.1	9.1	0.5	(D)	(D)	(D)	1.1	(D)
	Value added in mining..mil.dol..	153.0	(D)	13.2	-	12.1	1.1	129.5	6.9	(D)	(D)	(D)	10.0	(D)
142	Crushed and broken stone:													
	Establishments.....number..	406	403	25	-	24	1	368	22	342	4	3	7	3
	Employees.....1,000..	5.7	(D)	0.2	-	(D)	(D)	5.2	(D)	4.8	(D)	(D)	0.2	(D)
	Value added in mining..mil.dol..	81.3	(D)	3.6	-	(D)	(D)	77.5	(D)	70.7	(D)	(D)	-	(D)
144	Sand and gravel:													
	Establishments.....number..	521	521	28	-	25	3	232	-	180	52	3	258	-
	Employees.....1,000..	3.8	3.8	(D)	-	(D)	(D)	2.8	-	2.2	0.6	(D)	0.7	-
	Value added in mining..mil.dol..	50.6	50.6	(D)	-	(D)	(D)	38.7	-	29.6	9.2	(D)	9.2	-
145	Clay and related minerals:													
	Establishments.....number..	43	43	31	-	31	-	11	-	11	-	-	1	-
	Employees.....1,000..	0.4	0.4	0.1	-	0.1	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	10.1	10.1	5.8	-	5.8	-	(D)	-	(D)	-	-	(D)	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	15	15	3	-	3	-	10	2	7	1	-	2	-
	Employees.....1,000..	0.6	0.6	(D)	-	(D)	-	0.6	(D)	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	7.4	7.4	(D)	-	(D)	-	7.3	(D)	(D)	(D)	-	(D)	-
Minnesota:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	162	162	19	-	19	-	90	-	88	2	-	53	-
	Employees.....1,000..	1.7	1.7	(D)	-	(D)	-	1.3	-	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	21.4	21.4	(D)	-	(D)	-	18.6	-	(D)	(D)	-	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	30	30	-	-	-	-	30	-	30	-	-	-	-
	Employees.....1,000..	0.5	0.5	-	-	-	-	0.5	-	0.5	-	-	-	-
	Value added in mining..mil.dol..	6.6	6.6	-	-	-	-	6.6	-	6.6	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	115	115	8	-	8	-	57	-	55	2	-	50	-
	Employees.....1,000..	1.1	1.1	(D)	-	(D)	-	(D)	-	0.8	(D)	-	0.2	-
	Value added in mining..mil.dol..	13.8	13.8	(D)	-	(D)	-	(D)	-	11.3	(D)	-	1.7	-
Iowa:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	214	214	15	-	15	-	155	4	141	10	2	42	-
	Employees.....1,000..	2.6	2.6	(D)	-	(D)	-	2.2	(D)	2.0	(D)	(D)	0.2	-
	Value added in mining..mil.dol..	40.4	40.4	(D)	-	(D)	-	37.2	(D)	34.1	(D)	(D)	1.2	-
142	Crushed and broken stone:													
	Establishments.....number..	117	117	6	-	6	-	106	4	100	2	2	3	-
	Employees.....1,000..	1.9	1.9	0.1	-	0.1	-	1.7	(D)	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	30.5	30.5	0.8	-	0.8	-	29.3	(D)	(D)	(D)	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	90	90	5	-	5	-	47	-	39	8	-	38	-
	Employees.....1,000..	0.6	0.6	(D)	-	(D)	-	(D)	-	0.4	(D)	-	0.1	-
	Value added in mining..mil.dol..	9.2	9.2	(D)	-	(D)	-	(D)	-	6.1	(D)	-	1.2	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Under-ground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Under-ground mines	Open-pit mines	Combination methods and other methods			
WEST NORTH CENTRAL DIVISION--Con.														
Missouri:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	294	291	41	-	39	2	194	16	163	15	1	55	3
	Employees.....1,000..	3.5	(D)	0.2	-	(D)	(D)	3.2	(D)	(D)	0.2	(D)	(D)	(D)
	Value added in mining..mil.dol..	49.3	(D)	7.1	-	(D)	(D)	39.8	(D)	(D)	3.0	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	162	159	5	-	5	-	153	15	137	1	-	1	3
	Employees.....1,000..	2.2	(D)	0.1	-	0.1	-	2.1	(D)	1.9	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	27.5	(D)	1.0	-	1.0	-	26.7	(D)	22.9	(D)	-	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	69	69	3	-	1	2	28	-	14	14	1	37	-
	Employees.....1,000..	0.6	0.6	(D)	-	(D)	(D)	0.4	-	(D)	(D)	(D)	0.1	-
	Value added in mining..mil.dol..	8.3	8.3	(D)	-	(D)	(D)	6.1	-	(D)	(D)	(D)	1.9	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	11	11	3	-	3	-	7	-	7	-	-	1	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	(D)	-
Nebraska:														
142	Crushed and broken stone:													
	Establishments.....number..	22	22	3	-	3	-	18	-	17	1	1	-	-
	Employees.....1,000..	0.3	0.3	(D)	-	(D)	-	(D)	-	(D)	(D)	(D)	-	-
	Value added in mining..mil.dol..	3.8	3.8	(D)	-	(D)	-	(D)	-	(D)	(D)	(D)	-	-
144	Sand and gravel:													
	Establishments.....number..	111	111	5	-	4	1	46	-	37	9	1	59	-
	Employees.....1,000..	0.7	0.7	(D)	-	(D)	(D)	0.5	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	7.8	7.8	(D)	-	(D)	(D)	5.3	-	(D)	(D)	(D)	(D)	-
Kansas:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	150	150	18	-	17	1	91	5	70	16	-	41	-
	Employees.....1,000..	(D)	(D)	(D)	-	0.1	(D)	1.1	0.2	0.7	0.2	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	0.8	(D)	17.0	2.6	11.0	3.3	-	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	65	65	11	-	10	1	52	3	49	-	-	2	-
	Employees.....1,000..	0.6	0.6	(D)	-	(D)	(D)	0.6	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	10.6	10.6	(D)	-	(D)	(D)	9.6	(D)	(D)	-	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	75	75	4	-	4	-	33	-	18	15	-	38	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	0.3	-	(D)	(D)	-	0.1	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	4.8	-	(D)	(D)	-	1.0	-
SOUTH ATLANTIC DIVISION														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	810	798	93	5	87	1	549	15	506	28	21	135	12
	Employees.....1,000..	24.9	(D)	0.7	(D)	(D)	(D)	21.6	0.8	19.7	1.1	(D)	1.2	(D)
	Value added in mining..mil.dol..	450.0	(D)	8.1	(D)	(D)	(D)	395.4	8.8	370.5	16.1	(D)	7.8	(D)
142	Crushed and broken stone:													
	Establishments.....number..	336	332	4	2	2	-	315	11	300	4	5	8	4
	Employees.....1,000..	9.4	9.4	0.1	(D)	(D)	-	8.9	(D)	8.1	(D)	0.2	0.3	(Z)
	Value added in mining..mil.dol..	140.9	140.9	0.4	(D)	(D)	-	137.5	(D)	127.3	(D)	3.0	-	-
144	Sand and gravel:													
	Establishments.....number..	246	243	20	-	19	1	110	-	93	17	5	108	3
	Employees.....1,000..	3.7	(D)	0.1	-	(D)	(D)	2.8	-	2.4	0.4	(D)	0.7	(D)
	Value added in mining..mil.dol..	50.4	(D)	2.1	-	(D)	(D)	41.4	-	35.2	6.2	(D)	6.3	(D)
145	Clay and related minerals:													
	Establishments.....number..	73	68	16	1	15	-	51	1	50	-	-	1	5
	Employees.....1,000..	4.8	4.8	(D)	(D)	0.2	-	4.5	(D)	(D)	-	-	(D)	-
	Value added in mining..mil.dol..	81.1	81.1	(D)	(D)	1.8	-	78.2	(D)	(D)	-	-	(D)	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	42	42	2	-	2	-	27	-	26	1	10	3	-
	Employees.....1,000..	5.5	5.5	(D)	-	(D)	-	4.3	-	(D)	(D)	1.1	(D)	-
	Value added in mining..mil.dol..	160.0	160.0	(D)	-	(D)	-	125.2	-	(D)	(D)	34.6	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
14	SOUTH ATLANTIC DIVISION--Con.													
	Delaware, Maryland and District of Columbia													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	100	100	14	2	12	-	62	1	55	6	2	22	-
	Employees.....1,000..	1.8	1.8	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	0.2	-
	Value added in mining..mil.dol..	30.8	30.8	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	2.5	-
142	Crushed and broken stone:													
	Establishments.....number..	31	31	2	1	1	-	29	1	28	-	-	-	-
	Employees.....1,000..	0.8	0.8	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	-	-
	Value added in mining..mil.dol..	15.7	15.7	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	52	52	4	-	4	-	26	-	20	6	1	21	-
	Employees.....1,000..	0.8	0.8	(Z)	-	(Z)	-	(D)	-	0.3	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	12.6	12.6	0.6	-	0.6	-	(D)	-	5.9	(D)	(D)	(D)	-
14	Virginia:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	143	141	12	-	12	-	111	2	105	4	2	16	2
	Employees.....1,000..	3.4	(D)	0.1	-	0.1	-	3.1	(D)	2.9	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	44.8	(D)	0.9	-	0.9	-	41.4	(D)	39.5	(D)	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	86	86	1	-	1	-	83	2	80	1	1	1	-
	Employees.....1,000..	2.1	2.1	(D)	-	(D)	-	(D)	(D)	1.9	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	28.8	28.8	(D)	-	(D)	-	(D)	(D)	26.7	(D)	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	40	38	5	-	5	-	18	-	16	2	1	14	2
	Employees.....1,000..	0.7	(D)	(Z)	-	(Z)	-	(D)	-	0.5	(D)	(D)	0.1	(D)
	Value added in mining..mil.dol..	8.6	(D)	0.2	-	0.2	-	(D)	-	6.5	(D)	(D)	1.7	(D)
14	West Virginia:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	50	47	2	-	2	-	38	3	29	6	-	7	3
	Employees.....1,000..	1.2	(D)	(D)	-	(D)	-	1.0	(D)	0.7	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	15.8	(D)	(D)	-	(D)	-	15.3	(D)	10.2	(D)	-	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	37	34	-	-	-	-	33	3	27	3	-	1	3
	Employees.....1,000..	7	(D)	-	-	-	-	(D)	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	8.6	(D)	-	-	-	-	(D)	(D)	(D)	(D)	-	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	11	11	1	-	1	-	5	-	2	3	-	5	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	(D)	-	(D)	-
142	North Carolina:													
	Crushed and broken stone:													
	Establishments.....number..	73	72	1	-	1	-	69	2	67	-	1	1	1
	Employees.....1,000..	1.7	(D)	(D)	-	(D)	-	1.5	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining..mil.dol..	28.2	(D)	(D)	-	(D)	-	27.9	(D)	(D)	-	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	35	34	2	-	2	-	17	-	15	2	-	15	1
	Employees.....1,000..	0.5	(D)	(D)	-	(D)	-	(D)	-	0.4	(D)	-	0.1	(D)
	Value added in mining..mil.dol..	6.6	(D)	(D)	-	(D)	-	(D)	-	6.1	(D)	-	0.3	(D)
145	Clay and related minerals:													
	Establishments.....number..	13	12	3	-	3	-	9	-	9	-	-	-	1
	Employees.....1,000..	0.3	(D)	(D)	-	(D)	-	0.3	-	0.3	-	-	-	(D)
	Value added in mining..mil.dol..	4.0	(D)	(D)	-	(D)	-	3.8	-	3.8	-	-	-	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	25	25	8	-	8	-	16	1	13	2	1	-	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	0.4	(D)	(D)	(D)	(D)	-	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	3.4	(D)	(D)	(D)	(D)	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	SOUTH ATLANTIC DIVISION--Con.													
14	Georgia:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	141	137	26	-	26	-	85	5	79	1	2	24	4
	Employees.....1,000..	6.0	(D)	(D)	-	(D)	-	(D)	0.4	5.2	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	102.7	(D)	(D)	-	(D)	-	(D)	6.0	91.9	(D)	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	40	40	-	-	-	-	37	3	34	-	1	2	-
	Employees.....1,000..	2.0	2.0	-	-	-	-	(D)	(D)	1.6	-	(D)	(D)	-
	Value added in mining..mil.dol..	32.9	32.9	-	-	-	-	(D)	(D)	25.9	-	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	36	36	3	-	3	-	15	-	14	1	-	18	-
	Employees.....1,000..	0.3	0.3	(D)	-	(D)	-	(D)	-	0.2	(D)	-	0.1	-
	Value added in mining..mil.dol..	3.8	3.8	(D)	-	(D)	-	(D)	-	2.8	(D)	-	0.7	-
145	Clay and related minerals:													
	Establishments.....number..	37	33	7	-	7	-	25	-	25	-	-	1	4
	Employees.....1,000..	3.4	(D)	0.1	-	0.1	-	3.3	-	3.3	-	-	(D)	(D)
	Value added in mining..mil.dol..	60.6	(D)	0.6	-	0.6	-	60.1	-	60.1	-	-	(D)	(D)
14	Florida:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	163	163	12	2	9	1	105	-	100	5	10	36	-
	Employees.....1,000..	7.4	7.4	(D)	(D)	(D)	(D)	(D)	-	(D)	0.2	(D)	0.3	-
	Value added in mining..mil.dol..	189.0	189.0	(D)	(D)	(D)	(D)	(D)	-	(D)	5.4	(D)	1.8	-
142	Crushed and broken stone:													
	Establishments.....number..	55	55	1	1	-	-	50	-	50	-	2	2	-
	Employees.....1,000..	1.6	1.6	(D)	(D)	-	-	1.4	-	1.4	-	(D)	(D)	-
	Value added in mining..mil.dol..	20.0	20.0	(D)	(D)	-	-	19.1	-	19.1	-	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	44	44	3	-	2	1	16	-	15	1	1	24	-
	Employees.....1,000..	0.4	0.4	(D)	-	(D)	(D)	0.3	-	(D)	(D)	(D)	0.1	-
	Value added in mining..mil.dol..	6.0	6.0	(D)	-	(D)	(D)	4.5	-	(D)	(D)	(D)	0.9	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	31	31	1	-	1	-	22	-	21	1	6	2	-
	Employees.....1,000..	4.8	4.8	(D)	-	(D)	-	(D)	-	4.1	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	152.6	152.6	(D)	-	(D)	-	(D)	-	115.7	(D)	(D)	(D)	-
	EAST SOUTH CENTRAL DIVISION													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	479	474	56	4	49	3	327	18	281	28	9	82	5
	Employees.....1,000..	8.8	8.8	0.6	(D)	0.4	(D)	7.5	0.5	6.2	0.8	0.1	0.5	(Z)
	Value added in mining..mil.dol..	142.3	142.3	7.6	(D)	6.9	(D)	128.0	7.0	109.9	11.1	0.4	6.3	-
142	Crushed and broken stone:													
	Establishments.....number..	209	208	2	1	1	-	198	17	177	4	3	5	1
	Employees.....1,000..	4.6	(D)	(D)	(D)	(D)	-	4.5	(D)	3.9	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	69.6	(D)	(D)	(D)	(D)	-	69.1	(D)	61.0	(D)	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	169	165	12	-	9	3	82	-	59	23	1	70	4
	Employees.....1,000..	2.1	(D)	(D)	-	(D)	(D)	1.5	-	1.0	0.6	(D)	0.4	(D)
	Value added in mining..mil.dol..	27.4	(D)	(D)	-	(D)	(D)	20.3	-	12.7	7.6	(D)	5.0	(D)
145	Clay and related minerals:													
	Establishments.....number..	43	43	17	1	16	-	26	-	26	-	-	-	-
	Employees.....1,000..	0.9	0.9	0.1	(D)	(D)	-	0.8	-	0.8	-	-	-	-
	Value added in mining..mil.dol..	17.0	17.0	2.1	(D)	(D)	-	14.9	-	14.9	-	-	-	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	26	26	11	2	9	-	10	1	9	-	4	1	-
	Employees.....1,000..	0.7	0.7	0.2	(D)	(D)	-	(D)	(D)	(D)	-	0.1	(D)	-
	Value added in mining..mil.dol..	21.9	21.9	2.6	(D)	(D)	-	(D)	(D)	(D)	-	(Z)	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
EAST SOUTH CENTRAL DIVISION--Con.														
14	Kentucky:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	139	139	10	3	5	2	112	15	90	7	2	15	-
	Employees.....1,000..	2.9	2.9	(D)	(D)	0.1	(D)	2.5	(D)	(D)	(D)	(D)	0.2	-
	Value added in mining..mil.dol..	41.4	41.4	(D)	(D)	1.0	(D)	37.8	(D)	(D)	(D)	(D)	2.4	-
142	Crushed and broken stone:													
	Establishments.....number..	101	101	2	1	1	-	95	14	78	3	-	4	-
	Employees.....1,000..	2.1	2.1	(D)	(D)	(D)	-	2.0	(D)	1.6	(D)	-	(D)	-
	Value added in mining..mil.dol..	30.0	30.0	(D)	(D)	(D)	-	29.7	(D)	24.2	(D)	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	21	21	2	-	-	2	10	-	6	4	-	9	-
	Employees.....1,000..	0.4	0.4	(D)	-	-	(D)	0.3	-	0.1	0.2	-	(D)	-
	Value added in mining..mil.dol..	7.4	7.4	(D)	-	-	(D)	5.6	-	2.6	2.9	-	(D)	-
14	Tennessee:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	182	178	24	-	23	1	128	3	116	9	6	20	4
	Employees.....1,000..	3.3	(D)	0.3	-	(D)	(D)	2.8	(D)	(D)	.2	(D)	0.1	(D)
	Value added in mining..mil.dol..	61.5	(D)	3.5	-	(D)	(D)	56.4	(D)	(D)	2.1	(D)	1.2	(D)
142	Crushed and broken stone:													
	Establishments.....number..	79	78	-	-	-	-	74	3	70	1	3	1	1
	Employees.....1,000..	1.5	(D)	-	-	-	-	1.5	(D)	1.3	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	25.5	(D)	-	-	-	-	25.2	(D)	22.7	(D)	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	55	52	3	-	2	1	32	-	24	8	1	16	3
	Employees.....1,000..	0.6	(D)	(D)	-	(D)	(D)	0.5	-	(D)	(D)	(D)	0.1	(D)
	Value added in mining..mil.dol..	7.8	(D)	(D)	-	(D)	(D)	6.5	-	(D)	(D)	(D)	0.8	(D)
145	Clay and related minerals:													
	Establishments.....number..	11	11	2	-	2	-	9	-	9	-	-	-	-
	Employees.....1,000..	0.3	0.3	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	5.1	5.1	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
14	Alabama:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	100	100	14	1	13	-	61	-	54	7	-	25	-
	Employees.....1,000..	1.9	1.9	0.1	(D)	(D)	-	1.6	-	(D)	(D)	-	0.1	-
	Value added in mining..mil.dol..	28.5	28.5	1.9	(D)	(D)	-	24.7	-	(D)	(D)	-	1.9	-
142	Crushed and broken stone:													
	Establishments.....number..	28	28	-	-	-	-	28	-	28	-	-	-	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	49	49	3	-	3	-	21	-	15	6	-	25	-
	Employees.....1,000..	0.5	0.5	(D)	-	(D)	-	(D)	-	0.2	(D)	-	0.1	-
	Value added in mining..mil.dol..	5.5	5.5	(D)	-	(D)	-	(D)	-	1.7	(D)	-	1.9	-
14	Mississippi:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	58	57	8	-	8	-	27	-	22	5	-	22	1
	Employees.....1,000..	0.8	(D)	(D)	-	(D)	-	(D)	-	0.5	(D)	-	0.1	(D)
	Value added in mining..mil.dol..	10.9	(D)	(D)	-	(D)	-	(D)	-	7.6	(D)	-	0.9	(D)
144	Sand and gravel:													
	Establishments.....number..	44	43	4	-	4	-	19	-	14	5	-	20	1
	Employees.....1,000..	0.5	(D)	(D)	-	(D)	-	(D)	-	0.3	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	6.7	(D)	0.7	-	0.7	-	(D)	-	3.6	(D)	-	(D)	(D)
WEST SOUTH CENTRAL DIVISION														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	559	554	52	1	37	14	323	7	288	48	9	170	5
	Employees.....1,000..	13.5	(D)	2.4	(D)	0.2	(D)	9.1	(D)	6.8	(D)	(D)	1.6	(D)
	Value added in mining..mil.dol..	418.6	(D)	249.5	(D)	2.8	(D)	152.8	(D)	98.4	(D)	(D)	8.9	(D)
142	Crushed and broken stone:													
	Establishments.....number..	94	94	2	-	2	-	90	2	88	-	1	1	-
	Employees.....1,000..	3.2	3.2	(D)	-	(D)	-	3.1	(D)	(D)	-	(D)	(D)	-
	Value added in mining..mil.dol..	45.4	45.4	(D)	-	(D)	-	44.6	(D)	(D)	-	(D)	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	WEST SOUTH CENTRAL DIVISION--Con.													
14	Nonmetallic minerals, except fuels:													
144	Sand and gravel:													
	Establishments.....number..	346	344	18	-	16	2	177	-	139	38	5	144	2
	Employees.....1,000..	4.4	(D)	(D)	-	0.1	(D)	3.6	-	2.9	0.7	(D)	0.5	(D)
	Value added in mining..mil.dol..	61.4	(D)	(D)	-	1.1	(D)	51.8	-	43.0	8.7	(D)	6.3	(D)
145	Clay and related minerals:													
	Establishments.....number..	21	21	7	-	7	-	14	-	13	1	-	-	-
	Employees.....1,000..	0.4	0.4	(Z)	-	(Z)	-	0.3	-	(D)	(D)	-	-	-
	Value added in mining..mil.dol..	5.8	5.8	0.7	-	0.7	-	5.1	-	(D)	(D)	-	-	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	43	40	13	-	2	11	14	5	1	8	3	10	3
	Employees.....1,000..	4.3	(D)	2.0	-	(D)	(D)	1.4	0.5	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	288.8	(D)	244.7	-	(D)	(D)	39.1	14.9	(D)	(D)	(D)	(D)	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	34	34	5	1	3	1	24	-	23	1	-	5	-
	Employees.....1,000..	1.1	1.1	(D)	(D)	(D)	(D)	0.6	-	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	16.3	16.3	(D)	(D)	(D)	(D)	11.8	-	(D)	(D)	-	(D)	-
	Arkansas:													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	75	75	5	-	5	-	54	2	44	8	-	16	-
	Employees.....1,000..	1.8	1.8	(Z)	-	(Z)	-	(D)	(D)	(D)	(D)	-	(D)	-
	Value added in mining..mil.dol..	27.5	27.5	0.2	-	0.2	-	(D)	(D)	(D)	(D)	-	(D)	-
	Louisiana:													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	104	101	7	-	2	5	51	3	36	12	3	40	3
	Employees.....1,000..	4.2	(D)	0.9	-	(D)	(D)	2.2	(D)	1.0	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	203.2	(D)	144.9	-	(D)	(D)	49.8	(D)	15.1	(D)	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	76	76	2	-	2	-	41	-	33	8	2	31	-
	Employees.....1,000..	1.3	1.3	(D)	-	(D)	-	1.0	-	(D)	(D)	(D)	0.1	-
	Value added in mining..mil.dol..	18.0	18.0	(D)	-	(D)	-	15.0	-	(D)	(D)	(D)	1.7	-
147	Chemical and fertilizer minerals:													
	Establishments.....number..	18	15	4	-	-	4	5	3	-	2	1	5	3
	Employees.....1,000..	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)	0.5	(D)
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)	-	(D)
	Oklahoma:													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	70	70	5	-	4	1	51	1	41	9	1	13	-
	Employees.....1,000..	1.0	1.0	(D)	-	(D)	(D)	(D)	(D)	(D)	0.1	(D)	(D)	-
	Value added in mining..mil.dol..	14.2	14.2	(D)	-	(D)	(D)	(D)	(D)	(D)	0.8	(D)	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	27	27	-	-	-	-	26	1	25	-	1	-	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	0.6	(D)	(D)	-	(D)	-	-
	Value added in mining..mil.dol..	(D)	(D)	-	-	-	-	9.1	(D)	(D)	-	(D)	-	-
144	Sand and gravel:													
	Establishments.....number..	33	33	3	-	2	1	18	-	9	9	-	12	-
	Employees.....1,000..	0.3	0.3	(D)	-	(D)	(D)	0.3	-	0.1	0.1	-	(D)	-
	Value added in mining..mil.dol..	3.7	3.7	(D)	-	(D)	(D)	3.1	-	2.3	0.8	-	(D)	-
	Texas:													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	310	308	35	1	26	8	167	1	147	19	5	101	2
	Employees.....1,000..	6.4	(D)	(D)	(D)	0.2	1.1	4.2	(D)	3.7	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	173.7	(D)	(D)	(D)	2.2	100.6	63.3	(D)	51.4	(D)	(D)	(D)	(D)
142	Crushed and broken stone:													
	Establishments.....number..	41	41	2	-	2	-	39	-	39	-	-	-	-
	Employees.....1,000..	1.6	1.6	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	20.3	20.3	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	199	197	12	-	11	1	96	-	82	14	3	86	2
	Employees.....1,000..	2.3	(D)	(D)	-	(D)	(D)	1.8	-	1.6	0.3	(D)	(D)	(D)
	Value added in mining..mil.dol..	32.1	(D)	(D)	-	(D)	(D)	27.0	-	23.6	3.4	(D)	(D)	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	19	19	3	1	2	-	13	-	13	-	-	3	-
	Employees.....1,000..	0.6	0.6	(D)	(D)	(D)	-	0.4	-	0.4	-	-	(D)	-
	Value added in mining..mil.dol..	6.6	6.6	(D)	(D)	(D)	-	4.7	-	4.7	-	-	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Mineral Industries, by Type of Operation and Industry Groups: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry group or industry and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
MOUNTAIN														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	446	438	87	12	74	1	248	25	205	18	7	96	8
	Employees.....1,000.....	10.3	(D)	1.1	.6	(D)	(D)	8.6	5.1	3.0	.5	(D)	.5	(D)
	Value added in mining..mil.dol..	196.4	(D)	18.0	10.9	(D)	(D)	163.5	99.1	57.8	6.5	(D)	6.5	(D)
142	Crushed and broken stone:													
	Establishments.....number.....	63	62	3	-	3	-	57	3	54	-	1	-	1
	Employees.....1,000.....	.5	(D)	(D)	-	(D)	-	.5	(D)	(D)	-	(D)	-	(D)
	Value added in mining..mil.dol..	8.4	(D)	(D)	-	(D)	-	7.3	(D)	(D)	-	(D)	-	(D)
144	Sand and gravel:													
	Establishments.....number.....	175	175	8	-	8	-	88	-	73	15	3	76	-
	Employees.....1,000.....	1.3	1.3	(Z)	-	(Z)	-	1.1	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	19.0	19.0	0.4	-	0.4	-	15.2	-	(D)	(D)	(D)	(D)	-
145	Clay and related minerals:													
	Establishments.....number.....	36	36	20	2	17	1	16	-	16	-	-	-	-
	Employees.....1,000.....	0.9	0.9	(D)	(D)	0.1	(D)	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	15.4	15.4	(D)	(D)	1.3	(D)	(D)	-	(D)	-	-	-	-
147	Chemical and fertilizer minerals:													
	Establishments.....number.....	56	51	18	5	13	-	28	15	10	3	3	2	5
	Employees.....1,000.....	6.3	6.2	0.7	0.5	0.2	-	5.4	(D)	(D)	(D)	(D)	(D)	(Z)
	Value added in mining..mil.dol..	132.2	124.5	13.3	10.4	2.9	-	110.7	(D)	(D)	(D)	(D)	(D)	7.6
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number.....	81	80	21	5	16	-	58	7	51	-	-	1	2
	Employees.....1,000.....	1.0	(D)	(D)	(D)	(Z)	-	0.9	0.3	0.6	-	-	(D)	(D)
	Value added in mining..mil.dol..	17.7	(D)	(D)	(D)	0.6	-	17.4	4.0	13.4	-	-	(D)	(D)
Montana:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	48	47	6	3	3	-	25	3	20	2	1	15	1
	Employees.....1,000.....	1.0	(D)	0.3	(D)	(D)	-	0.6	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	11.9	(D)	3.4	(D)	(D)	-	7.9	(D)	(D)	(D)	(D)	(D)	(D)
147	Chemical and fertilizer minerals:													
	Establishments.....number.....	6	6	2	1	1	-	4	1	1	2	-	-	-
	Employees.....1,000.....	0.6	0.6	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	-	-	-
	Value added in mining..mil.dol..	6.8	6.8	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	-	-	-
Idaho:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	41	40	8	-	8	-	20	-	19	1	1	11	1
	Employees.....1,000.....	0.7	(D)	0.2	-	0.2	-	0.3	-	(D)	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	14.3	(D)	2.6	-	2.6	-	9.8	-	(D)	(D)	(D)	(D)	(D)
Wyoming:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	37	36	5	-	5	-	25	4	19	2	-	6	1
	Employees.....1,000.....	1.4	(D)	(Z)	-	(Z)	-	1.3	(D)	0.5	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	38.6	(D)	0.6	-	0.6	-	37.2	(D)	11.1	(D)	-	(D)	(D)
Colorado:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	93	93	23	2	21	-	54	1	48	5	3	13	-
	Employees.....1,000.....	0.7	0.7	0.1	(D)	(D)	-	0.6	(D)	0.5	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	11.1	11.1	1.0	(D)	(D)	-	9.4	(D)	8.1	(D)	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number.....	47	47	1	-	1	-	31	-	26	5	2	13	-
	Employees.....1,000.....	0.4	0.4	(D)	-	(D)	-	0.3	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	6.7	6.7	(D)	-	(D)	-	5.9	-	(D)	(D)	(D)	(D)	-
New Mexico:														
14	Nonmetallic minerals, except fuels:													
	Establishments.....number.....	56	55	6	1	5	-	30	7	22	1	1	18	1
	Employees.....1,000.....	3.9	(D)	(D)	(D)	(Z)	-	3.6	(D)	0.1	(D)	(D)	(D)	(D)
	Value added in mining..mil.dol..	73.8	(D)	(D)	(D)	0.3	-	66.4	(D)	4.3	(D)	(D)	(D)	(D)
147	Chemical and fertilizer minerals:													
	Establishments.....number.....	12	12	4	1	3	-	7	7	-	-	1	-	-
	Employees.....1,000.....	(D)	(D)	0.2	(D)	(D)	-	(D)	(D)	-	-	(D)	-	-
	Value added in mining..mil.dol..	(D)	(D)	6.3	(D)	(D)	-	(D)	(D)	-	-	(D)	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
	MOUNTAIN DIVISION--Con.													
14	Arizona:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	61	60	8	-	8	-	37	4	27	6	1	14	1
	Employees.....1,000..	0.6	(D)	(D)	-	(D)	-	0.5	0.1	0.3	0.1	(D)	(Z)	(D)
	Value added in mining..mil.dol..	6.6	(D)	(D)	-	(D)	-	5.7	0.6	3.4	1.7	(D)	0.3	(D)
144	Sand and gravel:													
	Establishments.....number..	28	28	1	-	1	-	16	-	10	6	-	11	-
	Employees.....1,000..	0.3	0.3	(D)	-	(D)	-	0.3	-	0.2	0.1	-	(D)	-
	Value added in mining..mil.dol..	4.1	4.1	(D)	-	(D)	-	3.8	-	2.1	1.7	-	(D)	-
14	Utah:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	66	65	20	3	16	1	34	5	28	1	-	11	1
	Employees.....1,000..	1.4	(D)	0.3	(D)	(Z)	(D)	1.0	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..mil.dol..	24.9	(D)	2.1	(D)	0.5	(D)	13.5	(D)	(D)	(D)	-	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	20	20	3	-	3	-	12	-	12	-	-	5	-
	Employees.....1,000..	0.1	0.1	(D)	-	(D)	-	0.1	-	0.1	-	-	(D)	-
	Value added in mining..mil.dol..	1.1	1.1	(D)	-	(D)	-	0.8	-	0.8	-	-	(D)	-
14	Nevada:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	44	42	11	3	8	-	23	1	22	-	-	8	2
	Employees.....1,000..	0.7	(D)	(D)	(D)	(D)	-	0.6	(D)	(D)	-	-	(D)	(D)
	Value added in mining..mil.dol..	15.2	(D)	(D)	(D)	(D)	-	13.7	(D)	(D)	-	-	(D)	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	8	8	3	2	1	-	5	-	5	-	-	-	-
	Employees.....1,000..	0.2	0.2	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	5.4	5.4	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-	-
	PACIFIC DIVISION													
14	Nonmetallic minerals, except fuels:													
	Establishments.....number..	697	694	116	12	100	4	420	5	368	47	21	137	3
	Employees.....1,000..	11.9	(D)	0.6	0.1	0.5	(Z)	9.4	0.1	7.2	2.1	(D)	1.8	(D)
	Value added in mining..mil.dol..	258.5	(D)	9.9	1.8	7.7	0.3	238.0	1.9	192.9	43.3	(D)	7.7	(D)
142	Crushed and broken stone:													
	Establishments.....number..	188	186	13	1	12	-	164	2	162	-	7	2	2
	Employees.....1,000..	2.3	(D)	0.1	(D)	(D)	-	2.1	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining..mil.dol..	45.3	(D)	3.0	(D)	(D)	-	41.2	(D)	(D)	-	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	338	337	23	-	20	3	190	-	149	41	10	114	1
	Employees.....1,000..	4.6	(D)	0.1	-	(D)	(D)	3.7	-	3.0	0.7	0.1	0.7	(D)
	Value added in mining..mil.dol..	90.4	(D)	1.7	-	(D)	(D)	81.7	-	70.0	11.8	1.3	5.7	(D)
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	79	79	29	11	18	-	44	2	40	2	3	3	-
	Employees.....1,000..	1.4	1.4	0.1	(D)	(D)	-	1.2	(D)	1.1	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	35.1	35.1	2.7	(D)	(D)	-	31.4	(D)	31.2	(D)	(D)	(D)	-
14	Washington:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	122	122	26	-	26	-	66	-	61	5	1	29	-
	Employees.....1,000..	1.0	1.0	(D)	-	(D)	-	0.7	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	15.6	15.6	(D)	-	(D)	-	12.9	-	(D)	(D)	(D)	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	31	31	2	-	2	-	29	-	29	-	-	-	-
	Employees.....1,000..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	61	61	6	-	6	-	31	-	26	5	-	24	-
	Employees.....1,000..	0.6	0.6	0.1	-	0.1	-	0.4	-	(D)	(D)	-	0.1	-
	Value added in mining..mil.dol..	9.4	9.4	1.1	-	1.1	-	7.3	-	(D)	(D)	-	1.0	-

See footnotes at end of table.

TABLE 3. Selected Statistics for Industry Groups by Type of Operations and Geographic Areas: 1967-Continued

(See appendix, Explanation of Terms)

Code	Industry, geographic area, and item	All types of establishments, total	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed ¹
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
PACIFIC DIVISION--Con.														
14	Oregon:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	132	131	9	-	9	-	94	1	81	12	4	24	1
	Employees.....1,000..	1.2	(D)	(D)	-	(Z)	-	1.0	(D)	0.8	(D)	(D)	0.1	(D)
	Value added in mining..mil.dol..	19.0	(D)	(D)	-	0.4	-	17.2	(D)	11.6	(D)	(D)	0.9	(D)
142	Crushed and broken stone:													
	Establishments.....number..	61	60	2	-	2	-	57	1	56	-	-	1	1
	Employees.....1,000..	0.6	(D)	(D)	-	(D)	-	6	(D)	(D)	-	-	(D)	(D)
	Value added in mining..mil.dol..	10.3	(D)	(D)	-	(D)	-	10.1	(D)	(D)	-	-	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	57	57	4	-	4	-	30	-	18	12	4	19	-
	Employees.....1,000..	0.5	0.5	(D)	-	(D)	-	0.4	-	(D)	(D)	(D)	(D)	-
	Value added in mining..mil.dol..	7.6	7.6	(D)	-	(D)	-	6.3	-	(D)	(D)	(D)	(D)	-
14	California:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	424	422	76	12	60	4	254	4	220	30	13	79	2
	Employees.....1,000..	9.4	(D)	0.4	(D)	0.3	(D)	7.5	(D)	5.7	(D)	(D)	1.4	(D)
	Value added in mining..mil.dol..	216.0	(D)	7.9	(D)	5.7	(D)	201.8	(D)	164.2	(D)	(D)	5.0	(D)
142	Crushed and broken stone:													
	Establishments.....number..	89	88	8	1	7	-	72	1	71	-	7	1	1
	Employees.....1,000..	1.3	(D)	0.1	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)	(D)
	Value added in mining..mil.dol..	27.0	(D)	2.7	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)	(D)
144	Sand and gravel:													
	Establishments.....number..	212	211	12	-	9	3	127	-	103	24	6	66	1
	Employees.....1,000..	3.5	(D)	(Z)	-	(D)	(D)	2.9	-	2.6	0.3	(D)	0.5	(D)
	Value added in mining..mil.dol..	70.6	(D)	0.5	-	(D)	(D)	66.4	-	61.1	5.3	(D)	3.5	(D)
145	Clay and related minerals:													
	Establishments.....number..	25	25	14	-	13	1	11	-	11	-	-	-	-
	Employees.....1,000..	(D)	(D)	0.2	-	(D)	(D)	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	(D)	(D)	1.5	-	(D)	(D)	(D)	-	(D)	-	-	-	-
149	Miscellaneous nonmetallic minerals:													
	Establishments.....number..	57	57	21	11	10	-	34	2	30	2	-	2	-
	Employees.....1,000..	1.3	1.3	0.1	(D)	(D)	-	1.2	(D)	1.2	(D)	-	(D)	-
	Value added in mining..mil.dol..	33.3	33.3	2.6	(D)	(D)	-	30.3	(D)	30.3	(D)	-	(D)	-
14	Hawaii:													
	Nonmetallic minerals, except fuels:													
	Establishments.....number..	12	12	4	-	4	-	7	-	7	-	1	-	-
	Employees.....1,000..	0.2	0.2	(D)	-	(D)	-	0.2	-	0.2	-	(D)	-	-
	Value added in mining..mil.dol..	5.0	5.0	(D)	-	(D)	-	4.9	-	4.9	-	(D)	-	-
142	Crushed and broken stone:													
	Establishments.....number..	5	5	-	-	-	-	5	-	5	-	-	-	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining..mil.dol..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Under 50 thousand (or under 50 employees).

TABLE 4. Detailed Statistics: 1967

Item	14. Nonmetallic minerals, except fuels, operations			1411.--Dimension stone					
				All operations			Dimension limestone		
	Total	Nonmetallic minerals, except fuels, industry	Included in manu- factures	Total	Dimension stone industry	Included in manu- factures	Total	Dimension limestone	Included in manu- factures
Establishments, total.....number..	7,691	6,582	1,109	366	244	122	71	46	25
With 1 to 19 employees.....do....	5,943	5,023	920	271	223	48	50	40	10
With 20 employees or more.....do....	1,748	1,559	189	95	21	74	21	6	15
All employees (average for the year).....1,000..	135.9	119.9	16.0	9.1	1.9	7.2	1.9	0.5	1.3
Payroll (all employees), total for year..million dollars..	899.7	812.0	87.7	47.4	9.3	38.1	11.0	2.7	8.3
Production, development, and exploration workers:									
Average for the year.....1,000..	109.9	94.8	15.1	8.0	1.8	6.3	1.6	0.5	1.2
March.....do....	(NA)	89.2	(NA)	(NA)	1.6	(NA)	(NA)	0.4	(NA)
May.....do....	(NA)	96.3	(NA)	(NA)	1.8	(NA)	(NA)	0.5	(NA)
August.....do....	(NA)	100.3	(NA)	(NA)	1.9	(NA)	(NA)	0.5	(NA)
November.....do....	(NA)	94.1	(NA)	(NA)	1.7	(NA)	(NA)	0.4	(NA)
Man-hours.....millions..	237.8	207.6	30.2	16.3	3.4	13.0	3.1	0.9	2.3
January-March.....do....	(NA)	46.8	(NA)	(NA)	0.8	(NA)	(NA)	0.2	(NA)
April-June.....do....	(NA)	52.9	(NA)	(NA)	0.9	(NA)	(NA)	0.2	(NA)
July-September.....do....	(NA)	56.2	(NA)	(NA)	0.9	(NA)	(NA)	0.3	(NA)
October-December.....do....	(NA)	51.4	(NA)	(NA)	0.8	(NA)	(NA)	0.2	(NA)
Wages.....million dollars..	670.1	588.9	81.2	39.2	7.6	31.6	9.0	2.2	6.8
Supplemental labor cost not included in payroll.....do....	(NA)	74.1	(NA)	(NA)	0.8	(NA)	(NA)	0.2	(NA)
Legally required expenditures, including Social									
Security contributions.....do....	(NA)	44.3	(NA)	(NA)	0.6	(NA)	(NA)	0.2	(NA)
Payments for voluntary program.....do....	(NA)	29.9	(NA)	(NA)	0.2	(NA)	(NA)	(Z)	(NA)
Cost of supplies, etc., total.....do....	1,151.5	1,080.7	70.8	28.1	5.2	22.9	5.1	1.5	3.6
Supplies used, minerals received for preparation,									
and purchased machinery.....do....	(NA)	767.6	(NA)	(NA)	3.4	(NA)	(NA)	1.1	(NA)
Cost of resales.....do....	(NA)	26.8	(NA)	(NA)	0.4	(NA)	(NA)	(D)	(NA)
Purchased fuels consumed.....do....	(NA)	107.7	(NA)	(NA)	0.5	(NA)	(NA)	0.1	(NA)
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	(NA)	5,248.4	(NA)	(NA)	27.6	(NA)	(NA)	7.1	(NA)
Cost.....million dollars..	(NA)	75.7	(NA)	(NA)	0.4	(NA)	(NA)	(D)	(NA)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	(NA)	102.6	(NA)	(NA)	0.4	(NA)	(NA)	0.2	(NA)
Value of shipments and receipts (including resales),									
total.....do....	3,354.8	2,996.0	358.8	104.3	22.2	82.1	23.1	6.5	16.6
Value of resales.....do....	(NA)	31.7	(NA)	(NA)	0.4	(NA)	(NA)	(D)	(NA)
Value added in mining.....do....	2,579.2	2,288.0	291.2	80.5	18.1	62.4	19.1	5.4	13.6
Capital expenditures (except land and mineral rights),									
total.....do....	375.9	372.7	3.2	4.3	1.1	3.2	1.2	0.4	0.7
Mineral development and exploration.....do....	(NA)	24.2	(NA)	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)
New structures and additions.....do....	(NA)	66.6	(NA)	(NA)	0.1	(NA)	(NA)	(Z)	(NA)
New machinery and equipment.....do....	(NA)	252.0	(NA)	(NA)	0.7	(NA)	(NA)	0.3	(NA)
Used plant and equipment.....do....	(NA)	29.9	(NA)	(NA)	0.2	(NA)	(NA)	0.1	(NA)
Gross book value of fixed assets, total.....do....	(NA)	3,565.2	(NA)	(NA)	17.5	(NA)	(NA)	4.7	(NA)
Mineral properties.....do....	(NA)	408.4	(NA)	(NA)	2.0	(NA)	(NA)	0.8	(NA)
Building and other structures (excluding land).....do....	(NA)	668.4	(NA)	(NA)	3.2	(NA)	(NA)	0.5	(NA)
Machinery and equipment.....do....	(NA)	2,488.2	(NA)	(NA)	12.3	(NA)	(NA)	3.5	(NA)
Mineral development and exploration expenditures,									
total.....do....	(NA)	37.9	(NA)	(NA)	0.2	(NA)	(NA)	(Z)	(NA)
Capitalized.....do....	(NA)	24.2	(NA)	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)
Expensed.....do....	(NA)	13.7	(NA)	(NA)	0.2	(NA)	(NA)	(Z)	(NA)
Mineral rights and geological expenditures.....do....	(NA)	54.0	(NA)	(NA)	0.1	(NA)	(NA)	(Z)	(NA)
Lease and land acquisition of nonproducing acreage.....do....	(NA)	11.0	(NA)	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)
Geological and geophysical.....do....	(NA)	1.0	(NA)	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)
Lease rents.....do....	(NA)	41.8	(NA)	(NA)	0.1	(NA)	(NA)	(Z)	(NA)
Man-hours worked by production, development, and									
exploration workers, total.....millions..	237.8	207.6	30.2	16.3	.4	13.0	3.1	0.9	2.3
At mines, total.....do....	(NA)	125.0	(NA)	(NA)	3.0	(NA)	(NA)	0.7	(NA)
Underground.....do....	(NA)	12.6	(NA)	(NA)	-	(NA)	(NA)	-	(NA)
Open-pit.....do....	(NA)	86.9	(NA)	(NA)	2.8	(NA)	(NA)	0.7	(NA)
Surface (including mine shops and yards).....do....	(NA)	25.4	(NA)	(NA)	0.2	(NA)	(NA)	(Z)	(NA)
At preparation plants.....do....	(NA)	82.5	(NA)	(NA)	0.3	(NA)	(NA)	0.2	(NA)
Man-hours spent on exploration and development									
(included above).....do....	(NA)	(NA)	(NA)	(NA)	0.3	(NA)	(NA)	(D)	(NA)

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967-Continued

Item	1411.--Dimension stone--Continued						1422.--Crushed and broken limestone		
	Dimension granite			Dimension stone, n.e.c.			Total	Crushed and broken limestone industry	Included in manufactures
	Total	Dimension granite sub-industry	Included in manufactures	Total	Dimension stone, n.e.c. sub-industry	Included in manufactures			
Establishments, total.....number..	95	50	45	200	148	52	1,713	1,484	229
With 1 to 19 employees.....do....	58	43	15	163	140	23	1,126	974	152
With 20 employees or more.....do....	37	7	30	37	8	29	587	510	77
All employees (average for the year).....1,000..	3.2	0.6	2.5	4.1	0.8	3.4	35.2	30.8	² 4.4
Payroll (all employees), total for year..million dollars..	16.3	3.6	12.7	20.0	3.0	17.1	223.5	197.5	² 26.0
Production, development, and exploration workers:									
Average for the year.....1,000..	2.7	0.6	2.1	3.7	0.7	3.0	30.2	25.8	² 4.4
March.....do....	(NA)	0.6	(NA)	(NA)	0.7	(NA)	(NA)	23.4	(NA)
May.....do....	(NA)	0.6	(NA)	(NA)	0.7	(NA)	(NA)	26.4	(NA)
August.....do....	(NA)	0.6	(NA)	(NA)	0.8	(NA)	(NA)	27.6	(NA)
November.....do....	(NA)	0.6	(NA)	(NA)	0.7	(NA)	(NA)	25.9	(NA)
Man-hours.....millions..	5.4	1.2	4.2	7.7	1.3	6.5	67.2	58.5	8.7
January-March.....do....	(NA)	0.3	(NA)	(NA)	0.3	(NA)	(NA)	12.5	(NA)
April-June.....do....	(NA)	0.3	(NA)	(NA)	0.3	(NA)	(NA)	15.2	(NA)
July-September.....do....	(NA)	0.3	(NA)	(NA)	0.3	(NA)	(NA)	16.4	(NA)
October-December.....do....	(NA)	0.3	(NA)	(NA)	0.3	(NA)	(NA)	14.4	(NA)
Wages.....million dollars..	12.9	2.9	10.1	17.3	2.6	14.7	179.6	153.6	26.0
Supplemental labor cost not included in payroll.....do....	(NA)	0.4	(NA)	(NA)	0.2	(NA)	(NA)	18.6	(NA)
Legally required expenditures, including Social Security contributions.....do....	(NA)	0.3	(NA)	(NA)	0.2	(NA)	(NA)	12.2	(NA)
Payments for voluntary program.....do....	(NA)	0.1	(NA)	(NA)	(Z)	(NA)	(NA)	6.4	(NA)
Cost of supplies, etc., total.....do....	11.3	2.1	9.2	11.7	1.5	10.1	281.0	253.1	27.9
Supplies used, minerals received for preparation, and purchased machinery.....do....	(NA)	1.5	(NA)	(NA)	0.8	(NA)	(NA)	181.7	(NA)
Cost of resales.....do....	(NA)	(D)	(NA)	(NA)	0.2	(NA)	(NA)	9.9	(NA)
Purchased fuels consumed.....do....	(NA)	0.2	(NA)	(NA)	0.2	(NA)	(NA)	21.0	(NA)
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	(NA)	13.5	(NA)	(NA)	7.0	(NA)	(NA)	1,113.9	(NA)
Cost.....million dollars..	(NA)	(D)	(NA)	(NA)	0.1	(NA)	(NA)	18.1	(NA)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	(NA)	0.1	(NA)	(NA)	0.2	(NA)	(NA)	22.4	(NA)
Value of shipments and receipts (including resales), total.....do....	38.5	8.7	29.8	42.7	7.0	35.7	813.7	666.6	147.1
Value of resales.....do....	(NA)	(D)	(NA)	(NA)	0.2	(NA)	(NA)	11.3	(NA)
Value added in mining.....do....	28.2	6.8	21.4	33.3	5.9	27.4	611.3	492.2	119.1
Capital expenditures (except land and mineral rights), total.....do....	1.0	0.2	0.7	2.2	0.4	1.8	(NA)	78.7	(NA)
Mineral development and exploration.....do....	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	2.4	(NA)
New structures and additions.....do....	(NA)	(Z)	(NA)	(NA)	0.1	(NA)	(NA)	10.0	(NA)
New machinery and equipment.....do....	(NA)	0.2	(NA)	(NA)	0.2	(NA)	(NA)	54.2	(NA)
Used plant and equipment.....do....	(NA)	(Z)	(NA)	(NA)	0.1	(NA)	(NA)	12.1	(NA)
Gross book value of fixed assets, total.....do....	(NA)	6.9	(NA)	(NA)	5.9	(NA)	(NA)	825.9	(NA)
Mineral properties.....do....	(NA)	0.8	(NA)	(NA)	0.4	(NA)	(NA)	54.7	(NA)
Building and other structures (excluding land).....do....	(NA)	1.2	(NA)	(NA)	1.6	(NA)	(NA)	141.3	(NA)
Machinery and equipment.....do....	(NA)	4.9	(NA)	(NA)	3.8	(NA)	(NA)	629.9	(NA)
Mineral development and exploration expenditures, total.....do....	(NA)	(Z)	(NA)	(NA)	0.2	(NA)	(NA)	6.1	(NA)
Capitalized.....do....	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	2.4	(NA)
Expensed.....do....	(NA)	(Z)	(NA)	(NA)	0.2	(NA)	(NA)	3.8	(NA)
Mineral rights and geological expenditures.....do....	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	7.4	(NA)
Lease and landacquisition of nonproducing acreage.....do....	(NA)	-	(NA)	(NA)	-	(NA)	(NA)	1.9	(NA)
Geological and geophysical.....do....	(NA)	-	(NA)	(NA)	(Z)	(NA)	(NA)	.5	(NA)
Lease rents.....do....	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	5.1	(NA)
Man-hours worked by production, development, and exploration workers, total.....millions..	5.4	1.2	4.2	7.7	1.3	6.5	67.2	58.5	8.7
At mines, total.....do....	(NA)	1.2	(NA)	(NA)	1.1	(NA)	(NA)	36.3	(NA)
Underground.....do....	(NA)	-	(NA)	(NA)	-	(NA)	(NA)	2.3	(NA)
Open-pit.....do....	(NA)	1.2	(NA)	(NA)	1.0	(NA)	(NA)	26.5	(NA)
Surface (including mine shops and yards).....do....	(NA)	-	(NA)	(NA)	0.1	(NA)	(NA)	7.5	(NA)
At preparation plants.....do....	(NA)	(Z)	(NA)	(NA)	0.1	(NA)	(NA)	22.2	(NA)
Man-hours spent on exploration and development (included above).....do....	(NA)	(D)	(NA)	(NA)	(D)	(NA)	(NA)	1.0	(NA)

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967-Continued

Item	1423.-- Crushed and broken granite ¹ industry	1429.--Crushed and broken stone, n.e.c.			Sand and gravel			
		Total	Crushed and broken stone, n.e.c., industry	Included in manu- factures ¹	1442.--Construction sand and gravel			1446.-- Industrial sand and gravel industry
					Total	Construc- tion sand and gravel industry	Included in manu- factures	
Establishments, total.....number..	149	412	400	12	3,402	3,069	333	163
With 1 to 19 employees.....do....	69	287	276	11	2,953	2,647	306	100
With 20 employees or more.....do....	80	125	124	1	449	422	27	63
All employees (average for the year).....1,000..	4.5	7.8	7.7	² 0.1	33.0	30.5	² 2.5	4.1
Payroll (all employees), total for year..million dollars..	27.1	56.9	56.2	² 0.7	215.9	202.0	² 13.9	27.2
Production, development, and exploration workers:								
Average for the year.....1,000..	3.9	6.2	6.1	² 0.1	27.3	24.8	² 2.5	3.2
March.....do....	3.8	(NA)	5.5	(NA)	(NA)	22.2	(NA)	3.1
May.....do....	4.0	(NA)	6.1	(NA)	(NA)	25.3	(NA)	3.2
August.....do....	4.0	(NA)	6.6	(NA)	(NA)	26.8	(NA)	3.2
November.....do....	3.8	(NA)	6.2	(NA)	(NA)	25.0	(NA)	3.1
Man-hours, total.....millions..	8.9	13.5	13.3	0.2	57.9	53.1	4.8	6.8
January-March.....do....	2.1	(NA)	2.8	(NA)	(NA)	11.2	(NA)	1.6
April-June.....do....	2.3	(NA)	3.4	(NA)	(NA)	13.7	(NA)	1.7
July-September.....do....	2.4	(NA)	3.7	(NA)	(NA)	15.0	(NA)	1.8
October-December.....do....	2.1	(NA)	3.4	(NA)	(NA)	13.2	(NA)	1.7
Wages.....million dollars..	22.0	40.8	40.1	0.7	168.5	154.6	13.9	19.1
Supplemental labor cost not included in payroll.....do....	2.6	(NA)	4.8	(NA)	(NA)	17.6	(NA)	2.7
Legally required expenditures, including Social Security contributions.....do....	1.5	(NA)	3.0	(NA)	(NA)	12.4	(NA)	1.5
Payments for voluntary program.....do....	1.1	(NA)	1.8	(NA)	(NA)	5.2	(NA)	1.2
Cost of supplies, etc., total.....do....	47.1	69.0	68.2	0.8	237.5	228.4	9.1	33.3
Supplies used, minerals received for preparation, and purchased machinery.....do....	39.5	(NA)	47.9	(NA)	(NA)	159.9	(NA)	21.8
Cost of resales.....do....	(D)	(NA)	(D)	(NA)	(NA)	7.2	(NA)	0.2
Purchased fuels consumed.....do....	2.2	(NA)	6.1	(NA)	(NA)	22.4	(NA)	4.8
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	165.6	(NA)	247.6	(NA)	(NA)	863.8	(NA)	221.4
Cost.....million dollars..	(D)	(NA)	(D)	(NA)	(NA)	15.6	(NA)	3.3
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	2.9	(NA)	8.0	(NA)	(NA)	23.2	(NA)	3.3
Value of shipments and receipts (including resales), total.....do....	114.2	186.9	182.7	4.2	689.2	625.4	63.8	89.6
Value of resales.....do....	(D)	(NA)	(D)	(NA)	(NA)	9.4	(NA)	0.2
Value added in mining.....do....	80.1	135.9	132.4	3.5	536.4	481.7	54.7	65.9
Capital expenditures (except land and mineral rights), total.....do....	13.0	(NA)	17.8	(NA)	(NA)	84.7	(NA)	9.6
Mineral development and exploration.....do....	(Z)	(NA)	0.4	(NA)	(NA)	3.6	(NA)	(Z)
New structures and additions.....do....	1.1	(NA)	2.0	(NA)	(NA)	13.6	(NA)	1.7
New machinery and equipment.....do....	11.1	(NA)	13.4	(NA)	(NA)	55.5	(NA)	7.3
Used plant and equipment.....do....	0.7	(NA)	2.0	(NA)	(NA)	11.9	(NA)	0.5
Gross book value of fixed assets, total.....do....	125.4	(NA)	180.1	(NA)	(NA)	738.0	(NA)	122.9
Mineral properties.....do....	6.5	(NA)	12.7	(NA)	(NA)	74.3	(NA)	15.8
Building and other structures (excluding land).....do....	19.1	(NA)	34.4	(NA)	(NA)	116.4	(NA)	25.7
Machinery and equipment.....do....	99.8	(NA)	133.0	(NA)	(NA)	547.3	(NA)	81.3
Mineral development and exploration expenditures, total.....do....	0.1	(NA)	1.0	(NA)	(NA)	5.9	(NA)	0.1
Capitalized.....do....	(Z)	(NA)	0.4	(NA)	(NA)	3.6	(NA)	(Z)
Expensed.....do....	0.1	(NA)	0.6	(NA)	(NA)	2.3	(NA)	0.1
Mineral rights and geological expenditures.....do....	2.5	(NA)	1.7	(NA)	(NA)	33.6	(NA)	0.9
Lease and land acquisition of nonproducing acreage.....do....	0.4	(NA)	0.6	(NA)	(NA)	5.2	(NA)	0.2
Geological and geophysical.....do....	(Z)	(NA)	(Z)	(NA)	(NA)	0.2	(NA)	(Z)
Lease rents.....do....	2.1	(NA)	1.2	(NA)	(NA)	28.3	(NA)	0.6
Man-hours worked by production, development, and exploration workers, total.....millions..	8.9	13.5	13.3	0.2	57.9	53.1	4.8	6.8
At mines, total.....do....	5.9	(NA)	7.0	(NA)	(NA)	34.8	(NA)	2.5
Underground.....do....	(Z)	(NA)	0.2	(NA)	(NA)	0.3	(NA)	(Z)
Open-pit.....do....	4.3	(NA)	5.9	(NA)	(NA)	29.2	(NA)	1.9
Surface (including mine shops and yards).....do....	1.5	(NA)	1.0	(NA)	(NA)	5.3	(NA)	0.5
At preparation plants.....do....	3.0	(NA)	6.3	(NA)	(NA)	18.3	(NA)	4.3
Man-hours spent on exploration and development (included above).....do....	(D)	(NA)	(D)	(NA)	(NA)	1.0	(NA)	0.1

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967-Continued

Item	Clay and related minerals									
	1452.-- Bentonite industry	1453.--Fire clay			1454.-- Fuller's earth industry	1455.-- Kaolin and ball clay industry	1456.-- Feldspar industry	1459.--Clay and related minerals, n.e.c.		
		Total	Fire clay industry	Included in manu- factures				Total	Clay and related minerals, n.e.c. industry	Included in manu- factures
Establishments, total.....number..	32	134	99	35	16	63	17	473	129	344
With 1 to 19 employees.....do....	16	121	87	34	5	29	8	432	90	342
With 20 employees or more.....do....	16	13	12	1	11	34	9	41	39	2
All employees (average for the year).....1,000..	0.9	1.0	0.8	² 0.2	1.1	3.7	0.5	3.5	2.3	² 1.2
Payroll (all employees), total for year..million dollars..	5.4	6.3	5.1	² 1.1	5.1	24.1	2.6	20.3	15.4	² 5.0
Production, development, and exploration workers:										
Average for the year.....1,000..	0.6	0.9	0.7	² 0.2	1.0	2.9	0.4	3.1	2.0	² 1.2
March.....do....	0.6	(NA)	0.7	(NA)	1.0	2.9	0.4	(NA)	2.0	(NA)
May.....do....	0.6	(NA)	0.7	(NA)	0.9	2.9	0.4	(NA)	2.0	(NA)
August.....do....	0.6	(NA)	0.7	(NA)	1.0	2.9	0.4	(NA)	2.0	(NA)
November.....do....	0.6	(NA)	0.7	(NA)	1.0	2.9	0.4	(NA)	2.0	(NA)
Man-hours, total.....millions..	1.4	1.8	1.4	0.4	2.0	6.4	0.9	6.5	4.4	2.2
January-March.....do....	0.4	(NA)	0.3	(NA)	0.5	1.6	0.2	(NA)	1.1	(NA)
April-June.....do....	0.4	(NA)	0.3	(NA)	0.5	1.4	0.2	(NA)	1.2	(NA)
July-September.....do....	0.4	(NA)	0.3	(NA)	0.5	1.7	0.2	(NA)	1.1	(NA)
October-December.....do....	0.3	(NA)	0.5	(NA)	0.5	1.7	0.2	(NA)	1.1	(NA)
Wages.....million dollars..	3.4	5.4	4.2	1.1	4.1	16.7	2.0	17.4	12.5	5.0
Supplemental labor cost not included in payroll....do....	0.4	(NA)	0.5	(NA)	0.4	2.7	0.2	(NA)	1.3	(NA)
Legally required expenditures, including Social										
Security contributions.....do....	0.3	(NA)	0.3	(NA)	0.3	1.3	0.1	(NA)	0.8	(NA)
Payments for voluntary program.....do....	0.2	(NA)	0.2	(NA)	0.1	1.4	0.1	(NA)	0.5	(NA)
Cost of supplies, etc., total.....do....	8.8	8.4	6.2	2.3	11.0	34.4	3.4	29.8	23.9	5.9
Supplies used, minerals received for preparation, and purchased machinery.....do....	5.4	(NA)	3.9	(NA)	7.8	25.1	2.0	(NA)	13.2	(NA)
Cost of resales.....do....	0.8	(NA)	0.2	(NA)	(Z)	0.6	-	(NA)	0.4	(NA)
Purchased fuels consumed.....do....	0.8	(NA)	0.7	(NA)	1.8	3.6	0.4	(NA)	7.3	(NA)
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	41.9	(NA)	13.8	(NA)	43.5	260.7	34.4	(NA)	144.6	(NA)
Cost.....million dollars..	0.6	(NA)	0.3	(NA)	0.5	2.6	0.4	(NA)	2.0	(NA)
Generated less sold.....million kw.-hrs..	-	(NA)	-	(NA)	-	-	-	(NA)	(Z)	(NA)
Contract work.....million dollars..	1.3	(NA)	1.1	(NA)	0.9	2.4	0.6	(NA)	1.0	(NA)
Value of shipments and receipts (including resales), total.....do....	21.2	32.5	23.1	9.4	22.5	87.9	9.4	81.3	54.1	27.2
Value of resales.....do....	1.0	(NA)	0.2	(NA)	(Z)	0.7	-	(NA)	0.5	(NA)
Value added in mining.....do....	13.2	25.6	18.5	7.1	15.6	65.1	6.6	57.0	35.7	21.4
Capital expenditures (except land and mineral rights), total.....do....	0.9	(NA)	1.5	(NA)	4.1	11.6	0.5	(NA)	5.5	(NA)
Mineral development and exploration.....do....	(Z)	(NA)	0.3	(NA)	0.2	0.2	(Z)	(NA)	0.1	(NA)
New structures and additions.....do....	0.2	(NA)	0.2	(NA)	0.3	0.6	0.1	(NA)	0.9	(NA)
New machinery and equipment.....do....	0.7	(NA)	0.9	(NA)	3.5	10.7	0.4	(NA)	4.2	(NA)
Used plant and equipment.....do....	(Z)	(NA)	0.1	(NA)	(Z)	0.1	(Z)	(NA)	0.3	(NA)
Gross book value of fixed assets, total.....do....	17.2	(NA)	21.3	(NA)	29.6	116.6	9.8	(NA)	83.3	(NA)
Mineral properties.....do....	2.9	(NA)	3.2	(NA)	2.1	12.7	1.0	(NA)	2.3	(NA)
Building and other structures (excluding land)....do....	2.8	(NA)	3.4	(NA)	3.1	22.7	2.4	(NA)	14.0	(NA)
Machinery and equipment.....do....	11.5	(NA)	14.7	(NA)	24.4	81.3	6.4	(NA)	66.9	(NA)
Mineral development and exploration expenditures, total.....do....	0.3	(NA)	0.7	(NA)	0.4	0.8	(Z)	(NA)	0.4	(NA)
Capitalized.....do....	(Z)	(NA)	0.3	(NA)	0.2	0.2	(Z)	(NA)	0.1	(NA)
Expensed.....do....	0.3	(NA)	0.4	(NA)	0.2	0.6	(Z)	(NA)	0.3	(NA)
Mineral rights and geological expenditures.....do....	0.2	(NA)	0.1	(NA)	0.1	1.2	0.1	(NA)	0.3	(NA)
Lease and land acquisition of nonproducing acreage.do....	(Z)	(NA)	(Z)	(NA)	(Z)	0.5	-	(NA)	0.1	(NA)
Geological and geophysical.....do....	(Z)	(NA)	(Z)	(NA)	-	0.2	-	(NA)	(Z)	(NA)
Lease rents.....do....	0.2	(NA)	0.1	(NA)	0.1	0.5	0.1	(NA)	0.1	(NA)
Man-hours worked by production, development, and exploration workers, total.....millions..	1.4	1.8	1.4	0.4	2.0	6.4	0.9	6.5	4.4	2.2
At mines, total.....do....	0.4	(NA)	1.0	(NA)	0.3	2.0	0.3	(NA)	2.0	(NA)
Underground.....do....	-	(NA)	0.1	(NA)	-	0.2	-	(NA)	(Z)	(NA)
Open-pit.....do....	0.4	(NA)	0.9	(NA)	0.3	1.5	0.2	(NA)	1.7	(NA)
Surface (including mine shops and yards).....do....	(Z)	(NA)	0.1	(NA)	(Z)	0.3	0.1	(NA)	0.2	(NA)
At preparation plants.....do....	1.0	(NA)	0.4	(NA)	1.7	4.4	0.6	(NA)	2.4	(NA)
Man-hours spent on exploration and development (included above).....do....	(Z)	(NA)	0.1	(NA)	(Z)	0.2	-	(NA)	(Z)	(NA)

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967-Continued

Item	1472.-- Barite industry	1473.-- Fluorspar industry	1474.-- Potash, soda, borate minerals industry	1475.-- Phosphate rock industry	1476.-- Salt industry	1477.-- Sulfur industry	1479.-- Chemical and fertilizer mining, n.e.c., industry	1481.-- Nonmetallic minerals services industry
Establishments, total.....number..	30	32	33	69	26	31	12	106
With 1 to 19 employees.....do....	20	23	5	28	8	10	9	96
With 20 employees or more.....do....	10	9	28	41	18	21	3	10
All employees (average for the year).....1,000..	0.9	0.7	7.9	8.1	2.6	3.2	0.3	0.8
Payroll (all employees), total for year..million dollars..	4.7	4.7	67.8	59.6	19.3	30.5	1.6	5.9
Production, development, and exploration workers:								
Average for the year.....1,000..	0.8	0.6	5.1	5.4	1.9	1.8	0.2	0.8
March.....do....	0.9	0.6	5.5	5.5	1.9	1.8	0.2	0.7
May.....do....	0.8	0.6	5.3	5.4	1.8	1.9	0.2	0.8
August.....do....	0.9	0.6	5.4	5.5	1.9	1.9	0.2	0.8
November.....do....	0.7	0.6	4.3	5.5	2.0	1.9	0.2	0.7
Man-hours, total.....millions..	1.6	1.3	10.7	12.0	4.4	4.0	0.4	1.5
January-March.....do....	0.4	0.3	2.8	3.0	1.2	1.0	0.1	0.3
April-June.....do....	0.4	0.3	2.7	3.0	1.0	1.0	0.1	0.4
July-September.....do....	0.4	0.3	2.7	3.0	1.0	1.0	0.1	0.4
October-December.....do....	0.4	0.3	2.5	3.1	1.2	1.0	0.1	0.4
Wages.....million dollars..	3.9	3.7	41.4	35.3	13.0	15.1	1.1	4.9
Supplemental labor cost not included in payroll.....do....	0.4	0.5	6.9	4.8	1.8	3.1	0.2	0.4
Legally required expenditures, including Social								
Security contributions.....do....	0.3	0.3	3.1	2.1	1.0	0.9	0.1	0.3
Payments for voluntary program.....do....	0.2	0.2	3.9	2.7	0.8	2.2	0.1	0.1
Cost of supplies, total.....do....	5.6	9.7	71.0	145.0	17.7	48.3	2.9	5.9
Supplies used, minerals received for preparation,								
and purchased machinery.....do....	3.2	7.9	51.3	112.7	14.2	26.3	2.2	4.8
Cost of resales.....do....	(Z)	(D)	(D)	(D)	(D)	-	(D)	(Z)
Purchased fuels consumed.....do....	0.3	0.6	11.9	7.4	0.8	9.4	0.2	0.7
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	47.0	49.6	626.7	1,999.6	100.5	22.2	18.8	6.6
Cost.....million dollars..	0.6	0.7	5.6	12.6	1.2	0.2	0.3	0.1
Generated less sold.....million kw.-hrs..	0.1	3.7	439.5	-	14.1	86.7	-	-
Contract work.....million dollars..	1.5	(D)	(D)	(D)	(D)	12.4	(D)	0.4
Value of shipments and receipts (including resales),								
total.....do....	19.6	19.6	215.7	296.6	81.3	271.2	5.6	15.3
Value of resales.....do....	(Z)	(D)	(D)	(D)	(D)	-	(D)	(Z)
Value added in mining.....do....	15.3	11.0	187.7	199.3	70.9	253.2	3.4	11.2
Capital expenditures (except land and mineral rights),								
total.....do....	1.2	1.1	43.0	47.7	7.3	30.3	0.7	1.9
Mineral development and exploration.....do....	(Z)	0.1	10.9	3.2	0.1	1.7	-	(Z)
New structures and additions.....do....	0.2	0.2	10.2	6.3	1.5	16.2	(Z)	0.2
New machinery and equipment.....do....	0.7	0.7	21.8	38.1	5.6	12.5	.7	1.4
Used plant and equipment.....do....	0.3	(Z)	0.1	0.1	0.1	0.1	(Z)	0.2
Gross book value of fixed assets, total.....do....	18.2	13.8	457.3	381.2	91.4	151.6	6.9	12.7
Mineral properties.....do....	2.4	4.0	89.3	69.7	15.1	17.4	0.3	(Z)
Building and other structures (excluding land).....do....	2.9	2.7	93.9	40.1	20.5	83.7	1.1	1.3
Machinery and equipment.....do....	12.9	7.1	274.0	271.4	55.7	50.5	5.5	11.4
Mineral development and exploration expenditures,								
total.....do....	0.1	0.2	12.2	3.9	0.1	3.3	0.1	(Z)
Capitalized.....do....	(Z)	0.1	10.9	3.2	0.1	1.7	-	(Z)
Expensed.....do....	0.1	0.1	1.3	0.7	(Z)	1.6	0.1	-
Mineral rights and geological expenditures.....do....	(Z)	(Z)	0.5	4.4	(Z)	0.2	(Z)	-
Lease and land acquisition of nonproducing acreage.....do....	-	(Z)	0.1	1.8	-	0.2	-	-
Geological and geophysical.....do....	-	(Z)	-	0.1	-	(Z)	-	-
Lease rents.....do....	(Z)	(Z)	0.3	2.4	(Z)	(Z)	(Z)	-
Man-hours worked by production, development and								
exploration workers, total.....millions..	1.6	1.3	10.7	12.0	4.4	4.0	0.4	1.5
At mines, total.....do....	0.9	0.7	5.8	7.8	3.0	3.9	0.2	1.5
Underground.....do....	0.2	0.6	4.4	0.9	1.7	-	(Z)	³ 0.2
Open-pit.....do....	0.7	(Z)	0.5	3.9	0.1	2.8	0.1	⁴ 0.3
Surface (including mine shops and yards).....do....	0.1	0.1	0.9	3.1	1.1	1.0	0.1	⁵ 1.0
At preparation plants.....do....	0.7	0.7	4.9	4.2	1.5	0.1	0.2	(X)
Man-hours spent on exploration and development								
(included above).....do....	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	(NA)

See footnotes at end of table.

TABLE 4. Detailed Statistics: 1967-Continued

Item	Miscellaneous nonmetallic minerals									
	1492.--Gypsum			1493.-- Mica industry	1494.-- Native asphalt and bitumens industry	1495.-- Pumice and pumicite industry	1496.-- Talc, soapstone, and pyro- phyllite industry	1497.-- Natural abrasives, except sand industry	1498.-- Peat industry	1499.-- Nonmetallic minerals, n.e.c. industry
	Total	Gypsum industry	Included in manu- factures							
Establishments, total.....number..	67	33	34	20	12	29	53	20	76	135
With 1 to 19 employees.....do....	55	28	27	15	5	27	35	15	72	103
With 20 employees or more.....do....	12	5	7	5	7	2	18	5	4	3
All employees (average for the year).....1,000..	0.9	0.4	² 0.5	0.3	0.5	0.2	1.2	0.3	0.5	2.9
Payroll (all employees), total for year..million dollars..	5.2	2.3	² 2.9	1.8	3.0	1.0	7.4	2.2	2.3	20.9
Production, development, and exploration workers:										
Average for the year.....1,000..	0.8	0.3	² 0.5	0.3	0.4	0.1	1.1	0.2	0.4	2.3
March.....do....	(NA)	0.3	(NA)	0.3	0.4	0.1	1.0	0.2	0.4	2.3
May.....do....	(NA)	0.3	(NA)	0.3	0.4	0.1	1.1	0.3	0.5	2.3
August.....do....	(NA)	0.4	(NA)	0.2	0.4	0.2	1.1	0.3	0.5	2.3
November.....do....	(NA)	0.3	(NA)	0.3	0.4	0.2	1.0	0.2	0.4	2.3
Man-hours, total.....millions..	1.7	0.7	1.0	0.5	0.8	0.2	2.3	0.5	1.0	4.9
January-March.....do....	(NA)	0.2	(NA)	0.1	0.2	0.1	0.6	0.1	0.2	1.2
April-June.....do....	(NA)	0.2	(NA)	0.1	0.2	0.1	0.6	0.1	0.3	1.3
July-September.....do....	(NA)	0.2	(NA)	0.1	0.2	0.1	0.6	0.1	0.3	1.3
October-December.....do....	(NA)	0.2	(NA)	0.1	0.2	0.1	0.5	0.1	0.2	1.2
Wages.....million dollars..	4.8	1.9	2.9	1.2	2.2	0.7	5.8	1.4	2.0	15.3
Supplemental labor cost not included in payroll.....do....	(NA)	0.2	(NA)	0.2	0.3	0.1	0.7	0.1	0.1	1.7
Legally required expenditures, including Social										
Security contributions.....do....	(NA)	0.1	(NA)	0.2	0.1	0.1	0.4	0.1	(Z)	0.9
Payments for voluntary program.....do....	(NA)	(Z)	(NA)	0.1	0.1	(Z)	0.3	0.1	(Z)	0.7
Cost of supplies, etc., total.....do....	4.5	2.5	2.0	1.9	3.7	1.0	6.1	2.8	2.3	30.8
Supplies used, minerals received for preparation, and purchased machinery.....do....	(NA)	2.0	(NA)	1.2	2.3	0.5	4.8	2.4	1.8	18.4
Cost of resales.....do....	(NA)	-	(NA)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(D)
Purchased fuels consumed.....do....	(NA)	0.2	(NA)	0.2	0.2	0.1	0.4	0.2	0.2	3.3
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	(NA)	8.9	(NA)	16.2	25.9	1.6	64.6	10.7	2.8	166.9
Cost.....million dollars..	(NA)	0.1	(NA)	0.2	0.3	0.1	0.7	0.2	(D)	(D)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	-	-	(Z)	(NA)	(Z)	-	(Z)
Contract work.....million dollars..	(NA)	0.2	(NA)	(D)	0.9	0.3	(D)	(Z)	0.2	5.5
Value of shipments and receipts (including resales), total.....do....	34.3	9.3	25.0	6.7	8.7	2.8	21.3	5.7	8.5	88.9
Value of resales.....do....	(NA)	-	(NA)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(D)
Value added in mining.....do....	30.3	7.4	23.0	5.3	5.8	2.0	16.9	4.3	6.7	62.8
Capital expenditures (except land and mineral rights), total.....do....	(NA)	0.6	(NA)	0.4	0.8	0.2	1.7	1.4	0.5	4.7
Mineral development and exploration.....do....	(NA)	0.1	(NA)	(Z)	0.3	(Z)	0.2	(Z)	(Z)	0.2
New structures and additions.....do....	(NA)	(Z)	(NA)	0.1	(Z)	(Z)	0.2	(Z)	(Z)	0.5
New machinery and equipment.....do....	(NA)	0.3	(NA)	0.3	0.3	0.2	1.2	1.3	0.4	3.7
Used plant and equipment.....do....	(NA)	0.2	(NA)	(Z)	0.1	(Z)	0.1	(Z)	0.1	0.4
Gross book value of fixed assets, total.....do....	(NA)	17.8	(NA)	5.6	7.1	1.5	20.0	8.4	4.7	79.4
Mineral properties.....do....	(NA)	1.2	(NA)	0.6	0.7	0.1	3.0	0.3	0.5	13.5
Building and other structures (excluding land).....do....	(NA)	5.0	(NA)	1.0	2.6	0.3	3.9	2.5	0.5	17.8
Machinery and equipment.....do....	(NA)	11.7	(NA)	4.0	3.7	1.1	13.0	5.6	3.6	48.1
Mineral development and exploration expenditures, total.....do....	(NA)	0.1	(NA)	(Z)	0.6	(Z)	0.3	(Z)	(Z)	0.8
Capitalized.....do....	(NA)	0.1	(NA)	(Z)	0.3	(Z)	0.2	(Z)	(Z)	0.2
Expensed.....do....	(NA)	(Z)	(NA)	-	0.2	(Z)	0.1	-	-	0.6
Mineral rights and geological expenditures.....do....	(NA)	(Z)	(NA)	0.1	(Z)	(Z)	0.1	-	(Z)	0.5
Lease and land acquisition of nonproducing acreage.....do....	(NA)	-	(NA)	(Z)	(Z)	(Z)	(Z)	-	(Z)	(Z)
Geological and geophysical.....do....	(NA)	(Z)	(NA)	-	(Z)	(Z)	-	-	-	(Z)
Lease rents.....do....	(NA)	(Z)	(NA)	(Z)	(Z)	(Z)	0.1	-	(Z)	0.5
Man-hours worked by production, development, and exploration workers, total.....millions..	1.7	0.7	1.0	0.5	0.8	0.2	2.3	0.5	1.0	4.9
At mines, total.....do....	(NA)	0.5	(NA)	0.1	0.5	0.2	1.1	0.2	0.6	2.5
Underground.....do....	(NA)	(Z)	(NA)	-	.3	-	.7	(Z)	-	0.4
Open-pit.....do....	(NA)	0.4	(NA)	0.1	0.2	0.1	0.3	0.1	0.6	1.0
Surface (including mine shops and yards).....do....	(NA)	(Z)	(NA)	(Z)	0.1	(Z)	0.1	-	(Z)	1.0
At preparation plants.....do....	(NA)	0.2	(NA)	0.4	0.3	0.1	1.2	0.3	0.4	2.4
Man-hours spent on exploration and development (included above).....do....	(NA)	(Z)	(NA)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1

Standard notes: - Represents zero. (D) Withheld to avoid disclosure of individual company data. (NA) Not available. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹Figures for crushed and broken granite included in manufactures are included with crushed and broken stone, n.e.c., included in manufactures.
²Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.

³For the Nonmetallic Minerals Services Industry, represents man-hours on exploration work, including geophysical and other exploratory surveying.

⁴For the Nonmetallic Minerals Services Industry, represents man-hours on stripping overburden.

⁵For the Nonmetallic Minerals Services Industry, represents man-hours on mining minerals for the account of others and man-hours on other services such as drilling.



1967 CENSUS OF Mineral Industries



MC67(1)-14A

INDUSTRY SERIES

STONE

SIC code	Industry
1411	Dimension stone
1422	Crushed and broken limestone
1423	Crushed and broken granite
1429	Crushed and broken stone, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
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Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	6
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	13
2B General Statistics for Manufacturing Establishments With Mining Operations, by Geographic Area: 1967 and 1963	15
3A Detailed Statistics, by Geographic Area: 1967	17
3B Detailed Statistics, by Selected Types of Operations: 1967	22
4 General Statistics, by Employment Size of Establishment: 1967	23
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	25
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	26
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	30
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

STONE

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 141, Dimension Stone, and Industry Group 142, Crushed and Broken Stone, Including Riprap. The separate industries and subindustries for which statistics are published in this report are as follows:

SIC Code and Title

- 1411--Dimension Stone
 - Dimension Limestone
 - Dimension Granite
 - Dimension Stone, Not Elsewhere Classified
- 1422--Crushed and Broken Limestone
- 1423--Crushed and Broken Granite
- 1429--Crushed and Broken Stone, Not Elsewhere Classified

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1411--Dimension Stone. This industry represents establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments primarily engaged in producing rough blocks and slabs. Establishments primarily engaged in mining or quarrying and shaping grindstones, pulpstones, millstones, burrstones, and sharpening stones are classified in industry 1497, Natural Abrasives, Except Sand; and those mining or quarrying dimension soapstone in industry 1496, Talc, Soapstone, and Pyrophyllite. Establishments primarily engaged in dressing (shaping, polishing, or otherwise finishing) rough blocks and slabs are classified in industry 3281, Cut Stone and Stone Products. Nepheline syenite operations are classified in industry 1459, Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified.

Dimension Limestone Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension limestone, including related rocks such as dolomite, travertine, and calcareous tufa.

Dimension Granite Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension granite, including related rocks such as gneiss, syenite, diorite, and gabbro.

Dimension Stone, N.E.C., Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension stone, not elsewhere classified, such as slate, marble, trap rock (basalt, diabase, and related rocks), sandstone and bluestone, mica schist, light-colored volcanic rocks, argillite, and greenstone.

Establishments classified in industry 1411, Dimension Stone, as interpreted in the 1967 minerals census, represent quarries with or without dressing plants operated as part of the same establishment if the establishment was primarily shipping rough dimension stone. In the 1963, 1958, and 1954 minerals censuses, only those quarries without dressing plants were included in industry 1411, Dimension Stone. This report also includes related 1967, 1963, 1958, and 1954 census of manufactures figures for dimension stone quarries operated in conjunction with dressing plants which represent part of

manufacturing industry 3281, Cut Stone and Stone Products. Thus, the dimension stone total figures in this report represent all dimension stone quarries and all dressing plants operated in conjunction with these quarries. Such figures for 1967, 1963, 1958, and 1954 are comparable with most of the statistics for years prior to 1954.

Industry 1422--Crushed and Broken Limestone. This industry represents establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa.

Industry 1423--Crushed and Broken Granite. This industry represents establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.

Industry 1429--Crushed and Broken Stone, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining or quarrying crushed and broken stone, not elsewhere classified, such as slate (including slate granules), marble, trap rock (basalt, diabase, and related rocks), sandstone (including quartzite and gneiss), and various light-colored volcanic rocks, mica schist, and mixed boulders.

Establishments classified in industry 1422 Crushed and Broken Limestone, industry 1423, Crushed and Broken Granite, and industry 1429, Crushed and Broken Stone, Not Elsewhere Classified, represent all separately operated quarries and crushing plants primarily producing crushed and broken stone. They do not include limestone, cement rock, and other stone quarries which are parts of establishments primarily manufacturing hydraulic cement, quicklime, hydrated lime, ready-mixed concrete, or bituminous concrete. Such establishments are classified in the manufacturing industries, principally in industry 3241, Cement, Hydraulic, and industry 3274, Lime. However, selected departmental data were obtained for such quarry operations and statistics for them from the 1967, 1963, 1958, and 1954 Censuses of Manufactures are presented throughout this report under the designation, "crushed stone quarries in manufactures."

Census figures for the Crushed and Broken Stone Industry exclude for 1967, as for previous years, data on production by Federal, State, and local governments. According to the Bureau of Mines, "noncommercial operations," principally of this type, produced about 8 percent of all crushed and broken stone in 1967.

SUMMARY OF FINDINGS

The total value of shipments and receipts of dimension stone quarries in 1967 was \$104 million. The value of shipments and receipts of quarries operated without dressing plants, the Dimension Stone Industry, was \$22.1 million, of which \$20.0 million represented rough dimension stone, the primary product of such establishments. Quarries with dressing plants, those classified in manufacturing, had products valued at \$82.1 million.

Shipments and receipts were distributed among the dimension stone subindustries as follows: Dimension limestone quarries with shipments amounting to \$23.1 million, of which \$6.5 million represented shipments by quarries without dressing plants (the dimension limestone subindustry); Dimension granite quarries with shipments amounting to \$38.5 million, of which \$8.7 million was by quarries without dressing plants (the dimension granite subindustry); and Dimension stone, n.e.c., quarries with shipments amounting to \$42.7 million, of which \$7.0 million was by quarries without dressing plants (the dimension stone, n.e.c., subindustry).

The combined total value of shipments of the crushed and broken stone industries in 1967 was \$964 million, of which crushed and broken stone, the primary product of these industries, amounted to \$880 million, and secondary products, products purchased and resold without further processing, and receipts for services amounted to \$84 million.

In addition, for crushed stone quarries in manufactures, the value of stone shipped or quarried and used in the same establishment was \$151 million.

Shipments and receipts were distributed among the crushed and broken stone industries as follows: Crushed and Broken Limestone Industry with shipments amounting to \$667 million and an additional \$147 million for stone shipped or used from limestone quarries in manufactures; Crushed and Broken Granite Industry with shipments amounting to \$114.2 million; Crushed and Broken Stone, Not Elsewhere Classified, Industry with shipments amounting to \$183 million; and an additional \$4.2 million for Crushed and Broken Granite, and Crushed and Broken Stone, Not Elsewhere Classified, quarries in manufactures.

The figures given above represent the gross value of shipments and receipts and contain some duplication due to inclusion of the value of stone transferred from one establishment to another in the same industry or subindustry for dressing or crushing. The value of stone so transferred at dimension stone quarries was about \$2.7 million, and the value of crushed and broken stone so transferred was about \$111.1 million. New shipments figures for quantity and value of stone which exclude this duplication are given in tables 1, 2, 3, and 6 of this report.

The general statistics (employment, payroll, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Dimension Stone Industry are, in general, comparable with product statistics for such stone published by the Bureau of Mines. The Census Bureau statistics for crushed and broken stone are less comparable to Mines statistics primarily because of the exclusion by the Bureau of the Census of the statistics on crushed and broken stone production by Federal, State, and local governments. The most nearly comparable statistics for stone from the two bureaus are shown in the table below. For crushed and broken stone, as indicated in this table, the Bureau of Mines shows separate figures for "commercial operations" and "government and contractor operations." Census figures include all of the first of these groups of establishments and some establishments in the second group, insofar as the latter represents contractors or subcontractors on Federal, State, or local government projects which were able to provide separate complete reports for their stone quarries.

Other reasons for differences in the product statistics are as follows:

- (1) The Bureau of the Census collects information on shipments (and some data on stone produced and used in the same establishment) and calculates net shipments, whereas the Bureau of Mines obtains figures on stone sold or used.
- (2) The Bureau of the Census excludes single unit establishments without paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which Census excludes is usually small.
- (3) Differences exist in coverage in certain areas for both collecting agencies.

(4) In some cases, a respondent reports his output of stone as one type of stone to the Bureau of the Census and as another to the Bureau of Mines.

(5) For dimension stone, the Bureau of the Census figures represent shipments of rough dimension stone from separately operated quarries as well as shipments of rough dimension stone and dressed dimension stone from quarries with associated dressing plants located at the quarry site. No figures are included in the Census tabulations in this report for shipments of dressed dimension stone from dressing plants not operated in conjunction with a quarry, even though such a dressing plant may be an integral part of a company engaged in quarrying and dressing stone. Bureau of Mines production data are compiled on the basis of quantities and values of sales of both rough blocks and finished products by primary producers. These Bureau of Mines figures are compiled on a company basis. For example, in the case of a stone company having three establishments, (a) a quarry with no dressing plant; (b) a quarry with a dressing plant; and (c) a separately operated dressing plant, the Census figures would include only the first two types of establishments, whereas the Bureau of Mines would compile its figures on output of stone for this company on the basis of the figures reported by all three types of establishments. Thus, the Bureau of Mines would show less rough dimension stone shipped for this company and more dressed dimension stone shipped than would be shown by the Bureau of the Census. There is a considerable tonnage loss in fabricating dressed stone from rough blocks. Accordingly, it would be expected that the aggregate Bureau of Mines tonnage would be less than that of the Bureau of the Census even though the operations of the same companies were covered by both agencies.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics	
	Production ¹	Shipments including interplant transfers		Stone sold or used by producers	
		Quantity	Value	Quantity	Value
	(1,000 short tons)	(1,000 short tons)	(million dollars)	(1,000 short tons)	(million dollars)
Dimension stone, total.....	(NA)	2,761.7	90.9	2,011.0	95.5
Rough (net).....	(NA)	1,915.0	25.6	² 1,011.0	² 22.4
Dressed.....	(NA)	846.7	65.3	² 1,000.0	² 73.1
Limestone, total.....	(NA)	1,230.7	19.5	561.0	16.6
Rough (net).....	(NA)	989.7	9.2	279.0	4.5
Dressed.....	(NA)	241.0	10.3	282.0	12.1
Granite, total.....	(NA)	725.1	37.4	630.0	39.0
Rough (net).....	(NA)	367.3	8.8	337.0	11.8
Dressed.....	(NA)	357.8	28.5	293.0	27.2
Stone, n.e.c., total.....	(NA)	806.0	34.1	820.0	39.9
Rough (net).....	(NA)	558.0	7.6	² 395.0	² 6.1
Dressed.....	(NA)	248.0	26.5	² 425.0	² 33.8
Crushed and broken stone, total.....	(NA)	(NA)	(NA)	³ 783,559.0	³ 1,111.5
Excluding Federal, State, and local government operations..	706,007.5	588,286.2	946.0	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	³ 720,594.0	³ 1,034.7
Government and contractor.....	(NA)	(NA)	(NA)	62,965.0	76.8
Limestone ⁴	548,515.5	436,688.4	647.3	568,902.0	783.1
Granite ⁴	67,553.0	64,879.5	110.3	62,443.0	94.7
Stone, n.e.c. ⁴	89,939.0	86,718.3	188.4	³ 152,214.0	³ 233.7

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

¹Represents stone shipments plus stone mined and used in the same establishment in making cement, lime, and other manufactured products.

²Figures for rough monumental marble are included with those for dressed monumental marble.

³Excludes shell.

⁴Census figures exclude operations by Federal, State, and local governments. Bureau of Mines figures represent totals for all stone sold or used by commercial, government, and contractor operations.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year and industry	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)
ALL STONE QUARRIES, TOTAL								
1967 ³	⁴ (NA)	2,640	887	56.6	354.9	48.3	105.9	281.6
1963.....	⁴ 2,389	3,147	874	60.1	307.3	51.7	112.1	248.3
1958 ⁶	⁴ 2,196	2,745	867	59.0	257.9	51.0	106.9	208.3
1954 ⁶	⁴ 2,163	2,729	773	56.3	209.7	51.0	111.7	182.0
1939 ⁷	1,526	⁸ 1,934	(NA)	⁹ 40.5	⁹ 44.7	⁹ 37.4	⁹ 74.8	⁹ 37.7
1929 ¹¹	(NA)	2,319	(NA)	63.8	86.0	58.3	(NA)	71.2
EXCLUDING CRUSHED AND BROKEN STONE QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1929 ¹¹	(NA)	2,081	(NA)	(NA)	(NA)	48.2	(NA)	58.6
1919 ¹¹	(NA)	1,844	(NA)	47.0	52.9	43.2	(NA)	45.7
1909 ¹²	4,039	4,039	(NA)	¹³ 84.1	¹³ 45.0	79.4	(NA)	39.8
1902 ¹⁴	5,475	⁸ 5,770	(NA)	76.5	42.0	¹⁵ 71.2	(NA)	37.5
1889 ¹⁴	888	⁸ 4,163	(NA)	82.4	30.6	77.7	(NA)	(NA)
1880.....	(NA)	⁸ 1,525	(NA)	39.7	(NA)	(NA)	(NA)	(NA)
1870.....	(NA)	1,120	(NA)	15.1	6.6	(NA)	(NA)	(NA)
1860 ¹⁷	(NA)	1,828	(NA)	15.7	5.8	(NA)	(NA)	(NA)
1850 ¹⁷	(NA)	1,149	(NA)	10.1	3.5	(NA)	(NA)	(NA)
1840.....	(NA)	(NA)	(NA)	7.9	(NA)	(NA)	(NA)	(NA)
ALL LIMESTONE QUARRIES								
1967 ³	⁴ (NA)	1,784	608	37.1	234.5	31.8	70.3	188.6
1963.....	⁴ 1,435	1,992	605	38.2	198.1	33.2	73.1	162.7
1958.....	⁴ 1,377	1,785	611	39.0	177.3	33.7	71.3	143.3
1954 ¹⁸	⁴ 1,426	1,796	543	37.3	141.0	33.8	74.1	123.1
1939 ⁷	965	¹² 1,256	(NA)	⁹ 27.7	⁹ 30.8	⁹ 25.6	⁹ 51.1	⁹ 26.2
1929 ¹¹	(NA)	1,167	(NA)	35.3	47.1	32.3	(NA)	39.2
EXCLUDING CRUSHED AND BROKEN LIMESTONE QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1929 ¹¹	(NA)	929	(NA)	(NA)	(NA)	22.3	(NA)	26.6
1919 ¹¹	(NA)	895	(NA)	24.1	27.7	22.1	(NA)	23.9
1909.....	1,677	1,677	(NA)	32.1	15.8	30.4	(NA)	14.1
1902 ¹⁴	3,137	⁸ 3,246	(NA)	33.8	16.6	¹⁶ 31.5	(NA)	14.8
1889 ¹⁴	(NA)	⁸ 1,954	(NA)	30.6	10.1	28.7	(NA)	9.0
ALL GRANITE QUARRIES								
1967 ^{3 22}	⁴ (NA)	244	117	7.7	43.4	6.6	14.3	34.9
1963.....	⁴ 215	291	107	7.6	35.9	6.5	14.0	28.8
1958.....	⁴ 201	258	106	7.2	28.6	6.4	13.2	23.4
1954.....	214	247	82	6.6	22.7	6.0	13.1	19.5
1939 ⁷	199	⁸ 242	(NA)	⁹ 4.8	⁹ 5.1	⁹ 4.4	⁹ 8.8	⁹ 4.2
1929 ¹¹	(NA)	406	(NA)	10.9	15.2	10.0	(NA)	12.6
1919.....	(NA)	358	(NA)	8.6	9.8	8.0	(NA)	8.6
1909.....	710	710	(NA)	19.7	12.2	18.7	(NA)	11.1
ALL STONE QUARRIES, N.E.C.								
1967 ^{3 22}	⁴ (NA)	612	162	11.9	76.9	9.9	21.2	58.1
1963.....	⁴ 739	854	162	14.3	73.3	12.1	25.0	56.8
1958.....	⁴ 631	702	150	12.7	51.9	10.9	22.4	41.6
1954 ^{6 18}	⁴ 566	678	146	12.2	45.4	11.0	24.3	39.0
1939 ⁷	⁴ 379	⁸ 431	(NA)	⁹ 7.9	⁹ 8.7	⁹ 7.3	⁹ 14.7	⁹ 7.3
1929 ¹¹	(NA)	746	(NA)	17.6	23.7	15.9	(NA)	19.4
1919 ¹¹	(NA)	591	(NA)	14.3	15.5	13.0	(NA)	13.2
1909 ¹²	1,652	1,652	(NA)	32.0	16.3	30.3	(NA)	14.6
INDUSTRY 1411.--DIMENSION STONE INDUSTRY AND DIMENSION STONE QUARRIES INCLUDED IN MANUFACTURES								
Dimension stone quarries, total.....1967 ³	⁴ (NA)	366	95	9.1	47.4	8.0	16.3	39.2
.....1963.....	⁴ 503	551	107	11.0	46.8	9.6	19.5	39.1
.....1958..	504	557	119	12.3	44.9	10.8	20.7	36.8
.....1954..	523	555	115	12.3	40.2	11.4	23.2	35.4
.....1929..	(NA)	912	(NA)	(NA)	(NA)	22.7	(NA)	27.7
Dimension stone industry.....1967 ³	⁴ (NA)	244	21	1.9	9.3	1.8	3.3	7.6
.....1963..	⁴ 289	319	25	2.2	7.8	2.0	3.8	7.0
.....1958..	⁴ 306	335	26	2.3	7.1	2.1	3.7	6.1
.....1954..	322	351	46	3.2	8.6	3.1	5.9	7.9
.....1939 ⁷ ..	154	⁸ 184	(NA)	2.9	3.0	2.7	(NA)	2.7
Dimension stone quarries included in manufactures.....1967 ³	(NA)	122	74	7.2	38.1	6.3	13.0	31.6
.....1963..	218	232	82	8.8	38.9	7.7	15.6	32.1
.....1958..	208	222	93	9.9	37.8	8.8	17.0	30.7
.....1954..	201	204	69	9.1	31.6	8.3	17.3	27.4

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Quantity of primary products ² (1,000 short tons)	Capital expenditures (million dollars)
ALL STONE QUARRIES, TOTAL--Continued							
1967 ³	907.8	338.3	⁵ 86.9	1,219.1	1,105.3	(NA)	⁵ 113.8
1963.....	776.5	303.1	⁵ 64.2	1,056.0	1,032.8	591,497.0	⁵ 87.7
1958 ⁶	663.2	234.1	⁵ 54.7	848.9	829.1	⁶ 479,163.0	⁵ 73.1
1954 ⁶	498.3	167.6	⁵ 47.6	665.5	656.1	367,743.0	48.1
1939 ⁷	(NA)	⁹ 1028.2	(NA)	(NA)	124.9	133,992.0	(NA)
1929 ¹¹	155.5	¹⁰ 45.1	8.5	(NA)	200.6	179,088.0	(NA)
EXCLUDING CRUSHED AND BROKEN STONE QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1929 ¹¹	(NA)	¹⁰ 36.3	(NA)	(NA)	169.6	121,444.0	(NA)
1919 ¹¹	75.1	27.0	(NA)	102.1	102.1	67,907.0	(NA)
1909 ¹²	63.4	12.9	(NA)	76.2	76.2	(NA)	(NA)
1902 ¹⁴	59.7	¹⁰ 10.8	(NA)	(NA)	70.5	(NA)	(NA)
1889 ¹⁴	45.1	¹⁰ 7.9	(NA)	(NA)	53.0	(NA)	(NA)
1880.....	(NA)	¹⁶ 0.2	(NA)	(NA)	18.4	(NA)	(NA)
1870.....	11.0	¹⁰ 1.1	(NA)	(NA)	12.1	(NA)	(NA)
1860 ¹⁷	11.1	5.4	(NA)	16.5	(NA)	(NA)	(NA)
1850 ¹⁷	5.7	2.5	(NA)	8.2	(NA)	(NA)	(NA)
1840.....	(NA)	(NA)	(NA)	3.7	(NA)	(NA)	(NA)
ALL LIMESTONE QUARRIES--Continued							
1967 ³	630.4	225.2	⁵ 60.9	836.8	728.7	(NA)	⁵ 79.9
1963.....	535.8	187.0	⁵ 41.5	703.7	688.2	462,377.0	⁵ 60.7
1958.....	466.6	166.5	⁵ 39.9	617.4	604.4	⁶ 384,778.0	⁵ 55.6
1954 ¹⁸	351.5	113.5	⁵ 33.5	465.8	¹⁸ 460.3	300,995.0	⁵ 32.7
1939 ⁷	(NA)	⁹ 1019.6	(NA)	(NA)	82.2	109,726.0	(NA)
1929 ¹¹	87.7	¹⁰ 29.6	5.7	(NA)	117.3	144,252.0	(NA)
EXCLUDING CRUSHED AND BROKEN LIMESTONE QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1929 ¹¹	(NA)	¹⁰ 20.7	(NA)	(NA)	86.2	86,608.0	(NA)
1919 ¹¹	37.1	15.8	(NA)	52.9	52.9	49,715.0	(NA)
1909.....	24.3	5.5	(NA)	29.8	29.8	(NA)	(NA)
1902 ¹⁴	25.0	¹⁰ 5.4	(NA)	(NA)	30.4	(NA)	(NA)
1889 ¹⁴	14.9	¹⁰ 4.2	(NA)	(NA)	19.1	(NA)	(NA)
ALL GRANITE QUARRIES--Continued							
1967 ³ ²²	108.3	45.8	⁵ 12.6	152.7	151.5	(NA)	⁵ 14.0
1963.....	88.2	43.8	⁵ 7.6	131.1	129.1	49,902.0	⁵ 8.5
1958.....	57.8	25.2	6.4	84.0	80.8	34,494.0	5.4
1954.....	43.4	16.6	⁵ 3.9	59.7	(NA)	22,627.0	⁵ 4.1
1939 ⁷	(NA)	⁹ 103.1	(NA)	(NA)	15.1	7,422.0	(NA)
1929 ¹¹	25.0	¹⁰ 5.4	0.7	(NA)	30.4	8,364.0	(NA)
1919.....	14.5	3.8	(NA)	18.3	18.3	4,420.0	(NA)
1909.....	16.3	2.7	(NA)	19.0	19.0	(NA)	(NA)
ALL STONE QUARRIES, N.E.C.							
1967 ³ ²²	169.2	67.3	⁵ 13.4	229.6	225.1	(NA)	⁵ 20.0
1963.....	152.4	72.3	⁵ 15.1	221.2	215.5	77,599.0	⁵ 18.5
1958.....	108.8	43.4	⁵ 8.3	147.5	143.9	⁶ 58,930.0	⁵ 12.0
1954 ⁶ ¹⁸	102.3	37.2	⁵ 10.1	138.5	(NA)	42,609.0	⁵ 11.1
1939 ⁷	(NA)	⁹ 105.5	(NA)	(NA)	27.6	16,479.0	(NA)
1929 ¹¹	42.8	¹⁰ 10.2	2.2	(NA)	53.0	26,472.0	(NA)
1919 ¹¹	23.4	7.4	(NA)	30.8	30.8	13,772.0	(NA)
1909 ¹²	22.8	4.6	(NA)	27.4	27.4	(NA)	(NA)
INDUSTRY 1411.--DIMENSION STONE INDUSTRY AND DIMENSION STONE QUARRIES INCLUDED IN MANUFACTURES--Con.							
Dimension stone quarries, total.....1967 ³ ..	80.5	28.1	(NA)	104.3	101.6	(NA)	4.3
.....1963..	70.9	36.2	4.1	106.2	102.2	3,016.0	5.1
.....1958..	67.1	23.2	2.8	89.5	83.4	2,818.0	3.7
.....1954..	61.8	17.3	2.7	78.9	¹⁸ 76.3	2,927.0	2.9
.....1929..	55.5	9.8	(NA)	(NA)	65.3	¹⁹ 17,149.0	(NA)
Dimension stone industry.....1967 ³ ..	18.1	4.5	0.7	22.1	22.1	1,264.4	1.1
.....1963..	14.8	5.2	0.8	19.7	19.2	1,330.0	1.1
.....1958..	13.1	3.5	0.5	15.9	15.7	1,234.0	1.2
.....1954..	15.2	3.8	0.9	18.9	¹⁸ 18.4	1,269.0	0.9
.....1939 ⁷ ..	5.3	1.1	(NA)	(NA)	6.4	(NA)	(NA)
Dimension stone quarries included in manufactures.....1967 ³ ..	62.4	22.9	(NA)	82.1	79.5	(NA)	3.2
.....1963..	56.1	30.9	3.4	86.4	83.0	1,686.0	3.9
.....1958..	54.1	19.7	2.3	73.6	67.7	1,584.0	2.5
.....1954..	46.6	13.5	1.8	60.0	¹⁸ 57.9	1,426.0	1.9

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Operating companies	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
INDUSTRY 1411.--DIMENSION STONE INDUSTRY AND DIMENSION STONE QUARRIES INCLUDED IN MANUFACTURES--Continued								
Dimension limestone quarries, total....1967 ³ .	(NA)	71	21	1.9	11.0	1.6	3.1	9.0
1963..	107	110	22	2.2	10.3	1.9	3.8	8.7
1958..	⁴ 120	124	28	2.6	10.7	2.3	4.2	8.8
1954..	103	106	29	2.9	10.4	2.7	5.4	9.5
1929..	(NA)	287	(NA)	(NA)	(NA)	5.8	(NA)	7.1
Dimension limestone subindustry.....1967 ³ .	(NA)	46	6	0.5	2.7	0.5	0.9	2.2
1963..	59	61	5	0.3	1.3	0.3	0.6	1.1
1958..	65	68	8	0.6	2.1	0.5	0.9	1.6
1954..	63	65	11	0.5	1.6	0.5	0.9	1.4
1939..	33	⁸ 40	(NA)	0.7	0.7	0.6	(NA)	0.6
Dimension limestone quarries included in manufactures.....1967 ³ .	(NA)	25	15	1.3	8.3	1.2	2.3	6.8
1963..	49	49	17	1.8	9.0	1.6	3.2	7.6
1958..	55	56	20	2.0	8.6	1.8	3.3	7.2
1954..	40	41	18	2.4	8.8	2.2	4.5	8.1
Dimension granite quarries, total.....1967 ³ .	(NA)	95	37	3.2	16.3	2.7	5.4	12.9
1963..	116	137	42	3.5	15.9	3.0	6.1	12.7
1958..	114	137	44	3.9	15.6	3.5	6.7	12.6
1954..	136	143	42	4.0	13.7	3.7	7.4	11.8
1929..	(NA)	320	(NA)	(NA)	(NA)	8.0	(NA)	10.5
Dimension granite subindustry.....1967 ³ .	(NA)	50	7	0.6	3.6	0.6	1.2	2.9
1963..	49	66	10	0.8	3.6	0.8	1.6	3.3
1958..	63	76	9	0.7	2.3	0.7	1.3	2.0
1954..	79	86	15	1.0	2.6	0.9	1.8	2.4
1939 ⁷ .	77	⁸ 93	(NA)	1.2	1.5	1.2	(NA)	1.3
Dimension granite quarries included in manufactures.....1967 ³ .	(NA)	45	30	2.5	12.7	2.1	4.2	10.1
1963..	70	71	32	2.6	12.3	2.2	4.5	9.5
1958..	56	61	35	3.2	13.3	2.8	5.5	10.6
1954..	57	57	27	3.0	11.1	2.7	5.7	9.4
Dimension stone quarries, n.e.c., total.....1967 ³ .	(NA)	200	37	4.1	20.0	3.7	7.7	17.3
1963..	280	304	43	5.4	10.6	4.8	9.6	17.6
1958..	272	296	47	5.7	18.5	5.0	9.7	15.3
1954..	284	306	44	5.5	16.2	5.0	10.3	14.1
1929..	(NA)	305	(NA)	(NA)	(NA)	8.9	(NA)	10.1
Dimension stone, n.e.c., subindustry.1967 ³ .	(NA)	148	8	0.8	3.0	0.7	1.3	2.6
1963..	181	192	10	1.0	3.0	0.9	1.6	2.6
1958..	178	191	9	1.0	2.7	0.9	1.5	2.4
1954..	180	200	20	1.8	4.4	1.7	3.3	4.1
1939..	44	⁸ 51	(NA)	1.0	0.8	0.9	(NA)	0.7
Dimension stone, n.e.c., quarries in manufactures.....1967 ³ .	(NA)	52	29	3.4	17.1	3.0	6.5	14.7
1963..	101	112	33	4.4	17.6	3.9	8.0	15.0
1958..	99	105	38	4.7	15.8	4.1	8.2	12.9
1954..	104	106	24	3.7	11.7	3.4	7.1	10.0
CRUSHED AND BROKEN STONE QUARRIES, TOTAL								
1967 ³	⁴ (NA)	2,274	792	47.5	307.5	40.3	89.6	242.4
1963.....	⁴ 1,886	2,586	767	49.1	260.5	42.1	92.6	209.3
1958 ⁶	1,692	2,188	748	46.7	212.9	40.1	86.2	171.5
1954 ⁶	⁴ 1,691	2,174	658	43.9	169.5	39.6	88.6	146.7
1939 ⁷	1,186	⁸ 1,536	(NA)	33.7	37.7	30.9	62.4	31.5
1929.....	(NA)	1,437	(NA)	(NA)	(NA)	35.6	(NA)	43.5
GROUP 142.--CRUSHED AND BROKEN STONE QUARRIES ONLY								
1967 ³	⁴ (NA)	2,033	714	43.0	280.8	35.8	80.7	215.7
1963.....	⁴ 1,780	2,256	668	43.2	229.1	36.2	80.8	177.8
1958 ⁶	⁴ 1,609	1,969	651	41.7	189.8	35.1	76.2	148.4
1954 ⁶	1,530	1,919	531	37.6	146.1	33.3	76.0	123.2
1939 ⁷	989	1,260	(NA)	26.6	29.2	24.1	(NA)	23.7
1929.....	(NA)	1,269	(NA)	(NA)	(NA)	25.6	(NA)	30.9

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Quantity of primary products ² (1,000 short tons)	Capital expenditures (million dollars)
INDUSTRY 1411.--DIMENSION STONE QUARRIES INCLUDED IN MANUFACTURES--Continued							
Dimension limestone quarries, total.....1967 ³ .	19.1	5.1	(NA)	23.1	23.0	(NA)	1.2
1963..	15.2	6.8	0.9	21.7	21.1	1,138.0	1.2
1958..	16.4	4.3	0.8	20.4	19.6	1,053.0	1.1
1954..	16.7	3.7	0.9	20.5	¹⁸ 20.1	1,069.0	0.8
1929..	16.3	3.0	(NA)	(NA)	19.3	¹⁹ 10,973.0	(NA)
Dimension limestone subindustry.....1967 ³ .	5.4	1.1	0.4	6.5	6.5	517.3	0.4
1963..	2.9	0.7	0.1	3.5	3.3	369.0	0.3
1958..	3.7	0.6	0.3	4.2	4.2	341.0	0.5
1954..	2.9	0.8	0.2	3.8	3.4	455.0	0.1
1939..	1.4	0.2	(NA)	(NA)	1.5	(NA)	(NA)
Dimension limestone quarries included in manufactures.....1967 ³ .	13.6	3.6	(NA)	16.6	16.5	(NA)	0.7
1963..	12.3	6.1	0.8	18.2	17.8	769.0	0.9
1958..	12.6	3.6	0.6	16.2	15.4	712.0	0.6
1954..	13.7	2.9	0.7	16.7	¹⁸ 16.7	614.0	0.6
Dimension granite quarries, total.....1967 ³ .	28.2	11.3	(NA)	38.5	37.5	(NA)	1.0
1963..	26.2	14.9	1.1	40.9	39.1	913.0	1.3
1958..	24.3	10.2	0.6	34.4	31.4	816.0	0.7
1954..	21.0	7.6	0.8	28.5	27.7	669.0	0.9
1929..	20.1	3.5	(NA)	(NA)	23.6	¹⁹ 2,413.0	(NA)
Dimension granite subindustry.....1967 ³ .	6.8	2.0	0.2	8.7	8.7	355.7	0.2
1963..	6.5	3.0	0.3	9.4	9.2	504.0	0.4
1958..	4.1	1.6	0.1	5.6	5.5	386.0	0.2
1954..	4.6	1.2	0.2	5.7	(D)	289.0	0.2
1939 ⁷ .	2.7	0.6	(NA)	3.3	3.3	(NA)	(NA)
Dimension granite quarries included in manufactures.....1967 ³ .	21.4	9.2	(NA)	29.8	28.9	(NA)	0.7
1963..	19.7	11.9	0.8	31.5	29.9	409.0	0.9
1958..	20.2	8.6	0.5	28.8	25.9	430.0	0.5
1954..	16.4	6.4	0.6	22.8	22.0	380.0	0.6
Dimension stone quarries, n.e.c., total.....1967 ³ .	33.3	11.7	(NA)	42.7	41.1	(NA)	2.2
1963..	29.5	14.5	2.2	43.6	42.0	965.0	2.5
1958..	26.4	8.7	1.4	34.6	32.4	949.0	1.9
1954..	24.1	6.0	1.0	29.9	28.5	957.0	1.2
1929..	19.1	3.3	(NA)	(NA)	22.4	¹⁹ 3,763.0	0.6
Dimension stone, n.e.c., subindustry.1967 ³ .	5.9	1.4	0.1	7.0	7.0	391.4	0.4
1963..	5.4	1.5	0.4	6.8	6.7	457.0	0.4
1958..	5.3	1.2	0.1	6.1	6.0	507.0	0.5
1954..	7.6	1.9	0.5	9.5	(NA)	525.0	0.6
1939..	1.2	0.3	(NA)	(NA)	1.5	(NA)	(NA)
Dimension stone, n.e.c., quarries in manufactures.....1967 ³ .	27.4	10.1	(NA)	35.7	34.1	(NA)	1.8
1963..	24.1	13.0	1.8	36.8	35.2	508.0	2.1
1958..	21.2	7.5	1.3	28.5	26.4	442.0	1.4
1954..	16.5	4.1	0.5	20.5	19.2	432.0	0.6
CRUSHED AND BROKEN STONE QUARRIES, TOTAL							
1967 ³	827.3	310.2	(NA)	1,114.8	1,003.7	(NA)	(NA)
1963.....	705.6	266.9	(NA)	949.7	930.7	587,860.0	(NA)
1958 ⁶	566.1	210.9	(NA)	759.4	745.6	⁶ 476,255.0	(NA)
1954 ⁶	436.6	150.3	(NA)	586.6	579.9	364,816.0	(NA)
1939 ⁷	75.9	¹⁰ 25.7	(NA)	(NA)	101.6	130,428.0	(NA)
1929.....	100.0	¹⁰ 35.3	(NA)	(NA)	135.3	161,939.0	(NA)
GROUP 142.--CRUSHED AND BROKEN STONE QUARRIES ONLY							
1967 ³	704.7	281.5	86.9	963.5	852.4	574,522.8	109.5
1963.....	581.7	235.9	60.0	794.9	775.7	474,413.0	82.7
1958 ⁶	449.4	188.8	51.8	620.7	606.9	⁶ 385,898.0	⁵ 69.3
1954 ⁶	339.5	128.4	45.0	467.7	461.0	283,659.0	45.2
1939 ⁷	59.4	20.2	(NA)	(NA)	79.6	90,686.0	(NA)
1929.....	(NA)	26.2	(NA)	(NA)	104.3	104,924.0	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)
CRUSHED AND BROKEN STONE QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1967 ³	(NA)	241	78	² 04.5	² 026.7	² 04.5	8.9	26.7
1963.....	194	330	99	² 05.9	² 031.4	² 05.9	11.8	31.4
1958.....	111	219	97	² 05.0	² 023.1	² 05.0	10.0	23.1
1954.....	⁴ 161	255	127	² 06.3	² 023.4	² 06.3	12.6	23.4
1939.....	197	⁸ 276	(NA)	7.1	8.4	6.8	(NA)	7.8
1929.....	(NA)	238	(NA)	(NA)	(NA)	10.0	(NA)	12.6
CRUSHED AND BROKEN LIMESTONE QUARRIES, TOTAL								
1967 ³	(NA)	1,713	587	35.2	223.5	30.2	67.2	179.6
1963.....	1,328	1,882	583	36.1	187.8	31.3	69.3	154.0
1958 ⁶	⁴ 1,257	1,661	584	36.4	166.6	31.4	67.1	134.4
1954 ¹⁸	⁴ 1,323	1,690	514	34.4	130.7	31.1	68.7	113.6
1939 ⁷	913	⁸ 1,194	(NA)	26.5	29.4	24.5	48.9	24.9
1929.....	(NA)	980	(NA)	(NA)	(NA)	26.5	(NA)	32.1
INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE								
1967 ³	(NA)	1,484	510	30.8	197.5	25.8	58.5	153.6
1963.....	1,277	1,612	491	31.1	160.6	26.3	59.4	126.8
1958 ⁶	1,181	1,463	487	31.5	143.7	26.5	57.3	111.5
1954 ¹⁸	1,174	1,447	388	28.2	107.8	24.9	56.3	90.7
1939 ⁷	716	⁸ 918	(NA)	19.4	20.9	17.7	(NA)	17.1
1929.....	(NA)	742	(NA)	(NA)	(NA)	16.4	(NA)	19.4
CRUSHED AND BROKEN LIMESTONE QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1967 ³	(NA)	229	77	² 04.4	² 026.0	² 04.4	8.7	26.0
1963.....	139	270	92	² 05.0	² 027.2	² 05.0	9.9	27.2
1958.....	104	198	97	² 04.9	² 022.9	² 04.9	9.8	22.9
1954.....	149	243	126	² 06.2	² 022.9	² 06.2	12.3	22.9
1939.....	197	⁸ 276	(NA)	7.1	8.4	6.8	(NA)	7.8
1929.....	(NA)	238	(NA)	(NA)	(NA)	10.0	(NA)	12.6
INDUSTRY 1423.--CRUSHED AND BROKEN GRANITE								
1967 ³	(NA)	149	80	4.5	27.1	3.9	8.9	22.0
1963.....	95	150	65	4.1	19.8	3.4	7.9	16.0
CRUSHED AND BROKEN GRANITE QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1967 ^{3 22}	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)
1963.....	4	4	-	(Z)	² 00.1	(Z)	(Z)	0.1
INDUSTRY 1429.--CRUSHED AND BROKEN STONE, N.E.C.								
1967 ³	(NA)	400	124	7.7	56.2	6.1	13.3	40.1
1963.....	408	494	112	8.1	48.7	6.4	13.6	35.0
1958.....	⁴ 341	385	105	6.9	33.1	5.8	12.5	26.1
1954 ^{6 18}	⁴ 273	363	101	6.7	28.8	5.9	13.7	24.4
CRUSHED AND BROKEN STONE, N.E.C., QUARRIES IN MANUFACTURING ESTABLISHMENTS								
1967 ^{3 22}	(NA)	²² 12	²² 1	²² 20.1	²² 20.7	²² 20.1	²² 0.2	²² 0.7
1963.....	54	56	7	² 00.9	² 04.1	² 00.9	1.8	4.1
1958 ²³	18	21	-	² 00.1	² 00.3	² 00.1	0.2	0.3
1954.....	⁴ 9	9	1	² 00.1	² 00.4	² 00.1	0.2	0.4

See footnotes on page 12.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Quantity of primary products ² (1,000 short tons)	Capital expenditures (million dollars)
CRUSHED AND BROKEN STONE QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1967 ³	122.6	28.7	(NA)	² 151.3	151.3	(NA)	(NA)
1963.....	123.9	31.0	(NA)	² 154.9	154.9	113,447.0	(NA)
1958.....	116.6	22.1	(NA)	² 138.7	138.7	90,357.0	(NA)
1954.....	97.0	21.8	(NA)	² 118.8	118.8	81,157.0	(NA)
1939.....	16.5	5.4	(NA)	(NA)	22.0	39,278.0	(NA)
1929.....	(NA)	8.4	(NA)	(NA)	31.0	57,645.0	(NA)
CRUSHED AND BROKEN LIMESTONE QUARRIES, TOTAL--Continued							
1967 ³	611.3	220.1	(NA)	813.7	705.7	(NA)	(NA)
1963.....	520.6	180.2	(NA)	681.9	667.1	460,834.0	(NA)
1958 ⁶	450.2	162.2	(NA)	597.0	584.8	⁶ 383,265.0	(NA)
1954 ^{1,8}	334.9	109.8	(NA)	445.3	440.3	299,926.0	(NA)
1939 ⁷	58.0	19.2	(NA)	(NA)	77.1	108,400.0	(NA)
1929.....	71.4	26.5	(NA)	(NA)	97.9	133,279.0	(NA)
INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Continued							
1967 ³	492.2	192.2	60.9	666.6	558.6	436,688.4	78.7
1963.....	408.5	153.3	40.6	542.9	528.0	355,812.0	59.5
1958 ⁶	334.8	140.3	39.1	459.6	447.5	⁶ 293,633.0	54.5
1954 ^{1,8}	239.6	88.5	32.6	328.8	323.7	220,233.0	32.0
1939 ⁷	41.4	13.7	(NA)	(NA)	55.2	69,124.0	(NA)
1929.....	(NA)	17.7	(NA)	(NA)	66.9	75,634.0	(NA)
CRUSHED AND BROKEN LIMESTONE QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1967 ³	119.1	27.9	(NA)	² 147.1	147.1	(NA)	(NA)
1963.....	112.2	26.9	(NA)	² 139.1	139.1	105,022.0	(NA)
1958.....	115.4	22.0	(NA)	² 137.3	137.3	89,632.0	(NA)
1954.....	95.3	21.3	(NA)	² 116.5	116.5	79,693.0	(NA)
1939.....	16.5	5.4	(NA)	(NA)	22.0	39,276.0	(NA)
1929.....	(NA)	8.4	(NA)	(NA)	31.0	57,645.0	(NA)
INDUSTRY 1423.--CRUSHED AND BROKEN GRANITE--Continued							
1967 ³	80.1	34.5	12.6	114.2	114.0	61.4	13.0
1963.....	61.7	28.7	6.5	89.7	89.6	48.7	7.2
CRUSHED AND BROKEN GRANITE QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1967 ^{3, 22}	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)
1963.....	0.3	0.1	(NA)	² 10.5	0.5	225.0	(NA)
INDUSTRY 1429.--CRUSHED AND BROKEN STONE, N.E.C.--Continued							
1967 ³	132.4	54.8	13.4	182.7	179.8	76,457.2	17.8
1963.....	111.5	53.8	12.9	162.2	158.2	68,449.0	16.0
1958.....	81.1	33.5	6.9	111.4	110.1	⁶ 56,647.0	10.1
1954 ^{6, 18}	76.6	30.8	9.1	106.6	(NA)	40,453.0	9.8
CRUSHED AND BROKEN STONE, N.E.C., QUARRIES IN MANUFACTURING ESTABLISHMENTS--Continued							
1967 ^{3, 22}	² 3.5	² 0.8	(NA)	² 12.4	² 4.2	(NA)	(NA)
1963.....	11.4	4.0	(NA)	² 15.4	15.4	8,072.0	(NA)
1958 ^{2, 3}	1.3	0.1	(NA)	² 1.4	1.4	725.0	(NA)
1954.....	1.6	0.3	(NA)	² 1.9	1.9	1,199.0	(NA)

See footnotes on page 12.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

FOOTNOTES FOR TABLE 1--14A.

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹For 1939 and earlier years, represents value of production and other receipts.

²Represents the product indicated by the name of the industry or subindustry (Industry group and industry totals for all stone, therefore, exceed the sum of the totals for the subindustries. For 1963, 1958, and 1954, for the mineral industries and for dimension stone quarries in manufactures, represents net shipments (gross shipments less stone received for dressing or crushing). For crushed and broken stone quarries in manufacturing establishments, represents gross shipments of stone plus production of stone for use in the same establishment in the manufacture of cement, lime, or other manufactured products. For 1939 and earlier years, represents net production.

³In 1967, for the first time data for establishments without paid employees were excluded from the census. In 1963, in industry 1411, there were approximately 52 establishments without paid employees. In industry 1422, there were approximately 107 establishments without paid employees; industry 1423, approximately 14 establishments; and industry 1429, approximately 44 establishments without paid employees in 1963. In industry 1411, these establishments accounted for approximately 11 percent of value added, while industries 1422, 1423, and 1429, these establishments accounted for less than 1 percent of value added.

⁴Represents the sum of figures shown for the separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.

⁵Excludes figures for crushed and broken stone quarries in manufacturing establishments.

⁶Revised in the 1958 census to include figures for establishments primarily engaged in producing "Quartz." Such establishments had been included in the Natural Abrasives, Except Sand, Industry for 1954 only.

⁷The total for "All stone quarries" includes data for 5 nonproducing operations. Except for number of establishments, figures by kind of stone exclude data for these establishments. The number of quarries of this type reported were: dimension granite, 2; crushed and broken limestone, 2; and crushed and broken stone, n.e.c., 1.

⁸Represents number of quarries.

⁹Excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was approximately \$1,555 thousand for plants at limestone quarries, \$2,266 thousand for plants at granite quarries, and \$4,102 thousand for plants at stone quarries, n.e.c.

¹⁰Excludes the cost of stone received for preparation.

¹¹Excludes data for nonproducing operations as follows: For 1929, limestone, 1 establishment; granite, 2 establishments; and stone, n.e.c., 9 establishments; for 1919, limestone, 1 establishment; and stone, n.e.c., 2 establishments.

¹²The figures for number of operating companies and number of establishments include data for two nonproducing establishments for which other data are combined with figures for metal mining.

¹³Includes data for central offices serving more than one subindustry. These were not included in the subindustry figures shown.

¹⁴Includes lime plants and their associated quarries. In 1902, the value of lime produced at establishments including a quarry was \$9,336 thousand.

¹⁵Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

¹⁶Represents cost of explosives.

¹⁷Probably includes data for separately operated stone dressing plants.

¹⁸Includes a portion of the products purchased for resale without further processing, amounting to less than \$1,350 thousand for all limestone quarries; to less than \$900 thousand for all dimension stone quarries; to less than \$200 thousand for all dimension stone quarries only; to less than \$800 thousand for all dimension stone quarries with dressing plants.

¹⁹Includes crushed and broken stone produced as a secondary product at dimension stone quarries.

²⁰The number of production development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

²¹Includes the estimated value of crushed or broken stone produced and used in the same establishment in the manufacture of cement, lime, and other manufactured products.

²²For 1967, figures for Crushed and Broken Granite Quarries in Manufacturing Establishments are included with Crushed and Broken Stone, N.E.C., Quarries in Manufacturing Establishments.

²³Figures for one granite quarry in a manufacturing establishment are included with the figures for such crushed and broken stone, n.e.c., quarries.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1411.--DIMENSION STONE													
DIMENSION STONE INDUSTRY													
United States, total.....	244	21	1.9	9.3	1.8	3.3	7.6	18.1	5.2	22.1	1.1	2.2	14.8
New England Division.....	22	6	0.4	2.2	0.4	0.7	1.9	4.6	1.4	5.9	0.1	0.4	3.6
Middle Atlantic Division.....	40	2	0.2	1.0	0.2	0.4	0.9	2.1	0.7	2.6	0.2	0.3	1.5
East North Central Division.....	55	6	0.6	2.9	0.5	1.0	2.3	5.6	1.3	6.6	0.4	0.4	3.1
Ohio.....	15	-	0.1	0.4	0.1	0.1	0.2	0.6	0.1	0.7	(2)	(NA)	(NA)
Indiana.....	13	5	0.3	1.9	0.3	0.6	1.5	3.5	0.7	4.1	0.2	0.2	2.0
Wisconsin.....	20	1	0.1	0.7	0.1	0.3	0.6	1.2	0.4	1.5	0.1	0.1	0.7
West North Central Division.....	21	-	0.1	0.5	0.1	0.2	0.4	0.9	0.3	1.1	0.1	0.2	1.4
South Atlantic Division.....	31	3	0.3	1.2	0.3	0.5	1.0	2.3	0.8	2.9	0.2	0.3	1.4
East South Central Division.....	18	4	0.2	0.9	0.2	0.3	0.6	0.9	0.3	1.2	(2)	0.2	1.0
West South Central Division.....	11	-	0.1	0.2	0.1	0.1	0.1	0.5	0.1	0.6	(2)	0.2	1.3
West Region.....	46	-	0.1	0.4	0.1	0.2	0.4	1.1	0.3	1.4	0.1	0.2	1.5
DIMENSION LIMESTONE SUBINDUSTRY													
United States, total.....	46	6	0.5	2.7	0.5	0.9	2.2	5.4	1.5	6.5	0.4	0.3	2.9
East North Central Division.....	22	6	0.4	2.3	0.4	0.7	1.8	4.4	1.0	5.1	0.3	0.2	1.9
Wisconsin.....	6	1	0.1	0.3	0.1	0.1	0.3	0.6	0.2	0.8	(2)	(NA)	(NA)
DIMENSION GRANITE SUBINDUSTRY													
United States, total.....	50	7	0.6	3.6	0.6	1.2	2.9	6.8	2.1	8.7	0.2	0.8	6.5
Northeast Region.....	14	6	0.4	2.1	0.3	0.7	1.8	4.3	1.3	5.6	0.1	0.4	3.5
South Region.....	19	1	0.2	0.9	0.1	0.3	0.6	1.4	0.4	1.7	0.1	(NA)	(NA)
DIMENSION STONE, N.E.C., SUBINDUSTRY													
United States, total.....	148	8	0.8	3.0	0.7	1.3	2.6	5.9	1.5	7.0	0.4	1.0	5.4
Northeast Region.....	41	2	0.2	0.9	0.2	0.4	0.8	1.9	0.5	2.2	0.1	0.3	1.4
North Central Region.....	33	-	0.1	0.6	0.1	0.2	0.4	1.1	0.2	1.2	0.1	0.2	1.1
South Region.....	33	6	0.3	1.2	0.3	0.6	1.1	2.0	0.6	2.5	0.1	(NA)	(NA)
West Region.....	41	-	0.1	0.3	0.1	0.1	0.3	0.9	0.3	1.1	0.1	(NA)	(NA)
INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE													
United States, total.....	1,484	510	30.8	197.5	25.8	58.5	153.6	492.2	253.1	666.6	78.7	31.1	408.5
Geographic Area													
New England Division.....	21	6	0.3	1.9	0.2	0.5	1.3	3.3	1.9	4.7	0.5	0.3	2.9
Middle Atlantic Division.....	174	74	5.0	35.3	3.9	8.8	25.3	84.7	41.5	115.3	10.9	4.7	69.5
Pennsylvania.....	118	48	3.3	22.6	2.7	6.0	16.4	56.2	31.2	79.7	7.7	2.7	37.1
East North Central Division.....	391	120	8.4	59.2	7.1	15.8	47.5	159.2	71.3	204.9	25.6	8.7	121.4
Ohio.....	105	36	2.5	16.0	2.0	4.6	12.4	41.0	23.0	54.2	9.8	2.6	34.6
Indiana.....	74	27	1.4	9.3	1.2	2.8	7.7	26.9	12.1	34.1	4.9	(NA)	(NA)
Illinois.....	140	40	2.4	18.0	2.0	4.6	14.2	53.7	20.0	68.4	5.3	2.5	38.5
West North Central Division.....	363	88	5.1	33.0	4.3	9.9	26.1	74.0	44.2	104.7	13.4	5.4	62.5
Minnesota.....	22	7	0.4	2.9	0.3	0.6	2.1	5.4	2.3	6.9	0.8	(NA)	(NA)
Missouri.....	138	36	2.0	12.3	1.7	3.6	10.0	23.7	17.4	35.5	5.6	2.4	26.5
South Atlantic Division.....	177	87	4.7	26.5	4.0	9.0	20.2	61.7	37.6	90.2	9.1	4.7	58.6
Virginia.....	47	28	1.2	5.6	1.0	2.1	4.4	11.8	7.2	16.9	2.0	1.5	14.7
North Carolina.....	14	6	0.3	2.3	0.2	0.5	1.2	5.7	2.7	7.7	0.7	(1)	3.4
Georgia.....	10	7	0.3	2.1	0.3	0.8	1.6	5.6	3.3	8.0	0.9	0.3	4.1
Florida.....	55	26	1.6	9.1	1.3	3.3	6.9	20.0	12.8	30.4	2.3	1.8	21.7
East South Central Division.....	199	85	4.2	22.8	3.6	8.2	18.3	64.2	35.0	87.9	11.4	4.3	60.1
Tennessee.....	75	31	1.5	8.0	1.3	3.1	6.5	25.2	(D)	34.8	(D)	(NA)	(NA)
Alabama.....	26	11	0.7	3.9	0.6	1.4	3.3	10.2	7.5	15.3	2.4	(NA)	(NA)
West South Central Division.....	71	38	2.2	12.4	1.8	4.5	9.3	29.9	14.8	39.1	5.6	2.1	22.5
Texas.....	32	19	1.3	7.8	1.0	2.6	5.2	17.1	9.6	22.7	4.0	1.2	12.4

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Continued													
<u>Geographic Area--Continued</u>													
Mountain Division.....	37	5	0.4	2.4	0.3	0.7	2.1	5.8	2.0	7.3	0.5	0.3	4.3
Colorado.....	9	3	0.1	0.6	0.1	0.2	0.5	1.8	0.8	2.4	0.4	0.1	1.1
Pacific Division.....	51	7	0.6	4.0	0.5	1.0	3.4	9.4	4.9	12.5	1.7	0.6	6.6
California.....	27	2	0.3	2.1	0.3	0.5	1.8	4.7	1.9	6.1	0.5	(NA)	(NA)
<u>Type of Operation</u>													
Producing establishments, total.....	1,471	510	30.7	197.2	25.8	58.4	153.3	492.2	252.9	666.5	78.6	² 30.2	408.6
Open quarries:													
Quarries only.....	43	7	0.5	3.4	0.5	1.1	2.8	9.1	6.7	11.5	4.3	0.5	7.8
Quarries with preparation plants:													
Crushing.....	1,287	430	26.5	168.6	22.7	51.5	135.2	440.1	219.8	592.2	67.8	26.3	360.6
Screening but no crushing.....	12	4	0.2	1.2	0.2	0.4	1.0	3.6	1.6	4.6	0.5	0.4	4.3
Other preparation methods only.....												(Z)	0.2
Combination open and underground quarries with crushing plants.....	18	15	0.9	6.2	0.8	1.8	4.9	10.7	6.3	15.3	1.7	0.7	7.2
Underground quarries with crushing plants.....	60	35	1.6	9.1	1.4	2.9	7.6	22.9	10.5	30.0	3.4	1.8	20.3
Separately operated preparation plants:													
Crushing and screening only.....	21	7	0.3	2.1	0.3	0.7	1.8	5.8	7.9	12.8	0.9	0.2	2.4
All other preparation methods.....												0.4	5.9
Nonproducing establishments.....	13	-	² 0.1	² 0.3	0.1	0.1	0.3	(Z)	0.2	0.2	(Z)	0.1	(NA)
INDUSTRY 1423.--CRUSHED AND BROKEN GRANITE													
United States, total.....	149	80	4.5	27.1	3.9	8.9	22.0	80.1	47.1	114.2	13.0	4.1	61.7
<u>Geographic Area</u>													
New England Division.....	6	4	0.2	1.8	0.1	0.3	1.2	3.0	2.3	5.1	0.2	0.2	1.3
Massachusetts.....	3	3	0.1	1.3	0.1	0.2	0.8	1.9	2.1	3.9	0.1	(NA)	(NA)
Connecticut.....	3	1	0.1	0.5	0.1	0.1	0.4	1.1	0.2	1.2	0.1	(NA)	(NA)
Middle Atlantic Division.....	7	1	0.1	0.6	0.1	0.2	0.5	1.5	0.6	1.9	0.1	(NA)	(NA)
North Central Division.....	13	2	0.1	0.8	0.1	0.3	0.7	1.7	0.6	2.0	0.3	(NA)	(NA)
South Region.....	105	69	3.7	20.4	3.2	7.5	16.7	65.2	41.0	94.5	11.7	3.2	48.5
Virginia.....	21	12	0.5	2.9	0.4	0.9	2.4	10.5	5.2	13.8	1.8	(NA)	(NA)
North Carolina.....	45	25	1.0	5.2	0.9	2.2	4.5	18.6	10.3	25.4	3.4	(NA)	(NA)
Georgia.....	22	20	1.1	6.1	1.0	2.4	5.1	20.2	11.1	27.7	3.7	(NA)	(NA)
West Region.....	18	4	0.4	3.5	0.3	0.7	2.8	8.8	2.6	10.7	0.7	(NA)	(NA)
California.....	12	4	0.4	3.3	0.3	0.7	2.6	8.3	2.3	9.9	0.7	(NA)	(NA)
<u>Type of Operation</u>													
Open quarries with crushing plants.....	135	78	4.3	25.5	3.8	8.7	21.2	77.3	46.0	110.3	13.0	(NA)	(NA)
INDUSTRY 1429.--CRUSHED AND BROKEN STONE, NOT ELSEWHERE CLASSIFIED													
United States, total.....	400	124	7.7	56.2	6.1	13.3	40.1	132.4	68.2	182.7	17.8	8.1	111.5
<u>Geographic Area</u>													
New England Division.....	21	5	0.4	3.9	0.3	0.7	2.6	9.0	3.6	11.4	1.2	0.4	6.7
Middle Atlantic Division.....	77	35	2.3	19.2	1.8	4.0	13.2	46.0	21.6	62.4	5.1	2.6	38.4
East North Central Division.....	38	9	0.6	4.8	0.3	0.7	1.9	7.4	4.6	11.3	0.7	0.6	9.0
Ohio.....	10	2	0.2	1.5	(Z)	0.2	0.3	1.8	1.1	2.7	0.2	0.1	0.9
Illinois.....	7	2	0.1	0.8	(Z)	0.1	0.3	0.7	0.7	1.3	(Z)	(NA)	(NA)
West North Central Division.....	32	9	0.4	2.8	0.3	0.7	1.9	5.7	2.7	7.7	0.7	0.2	1.4

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
<u>Geographic Area</u>	INDUSTRY 1429.--CRUSHED AND BROKEN STONE, NOT ELSEWHERE CLASSIFIED--Continued												
South Region.....	87	41	2.4	13.8	2.1	4.7	10.7	34.5	21.4	50.6	5.4	2.4	30.6
Virginia.....	18	10	0.4	2.5	0.3	0.8	1.7	6.5	3.9	9.3	1.2	0.4	6.9
North Carolina.....	15	6	0.3	1.5	0.3	0.6	1.3	4.2	3.8	7.1	1.0	(NA)	(NA)
Georgia.....	8	7	0.5	2.8	0.4	1.0	2.2	7.1	3.8	9.7	1.2	(NA)	(NA)
Texas.....	9	6	0.3	1.5	0.3	0.6	1.4	3.2	1.7	4.4	0.5	(NA)	(NA)
West Region.....	145	25	1.5	11.8	1.3	2.5	9.8	29.9	14.2	39.4	4.7	1.9	25.5
Oregon.....	48	7	0.4	2.6	0.3	0.7	2.2	7.0	3.2	9.4	0.8	0.4	4.0
California.....	50	10	0.6	5.4	0.5	1.0	4.5	14.0	6.4	18.8	1.6	0.7	11.3
<u>Type of operation</u>													
Open quarries only:													
Quarries only.....	16	1	0.1	0.6	0.1	0.1	0.6	1.8	0.6	2.3	0.1	0.4	4.6
Quarries with preparation plants:													
Crushing.....	325	107	6.5	46.2	5.5	12.0	36.5	119.5	62.1	165.6	16.0	6.3	95.8
Screening, but not crushing.....	9	3	0.1	0.6	0.1	0.2	0.5	1.3	0.7	1.8	0.2	0.1	1.6
Underground.....	6	3	0.3	1.9	0.3	0.7	1.6	6.7	2.9	8.8	0.8	(NA)	(NA)
Separately operated preparation plants.	13	1	0.1	0.9	0.1	0.2	0.8	1.9	1.6	3.1	0.4	0.3	4.0

Note: Detailed figures may not add to total because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Figures for North Carolina are included with those for Florida.²Excludes data for separately reported central offices and related facilities. These were not distributed by type of operation.

TABLE 2B. General Statistics for Manufacturing Establishments With Mining Operations by Geographic Area: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc.	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	DIMENSION STONE QUARRIES INCLUDED IN MANUFACTURES												
United States, total.....	122	74	7.2	38.1	6.3	13.0	31.6	62.4	22.9	82.1	3.2	8.8	56.1
New England Division.....	22	13	1.6	9.1	1.4	3.0	7.5	13.5	5.8	18.8	0.6	1.9	12.9
Vermont.....	12	7	1.0	5.2	0.9	2.0	4.7	7.7	3.4	10.8	0.3	(NA)	(NA)
Middle Atlantic Division.....	22	10	0.7	3.5	0.6	1.3	3.1	4.8	1.5	6.1	0.2	0.7	4.1
East North Central.....	24	12	1.3	7.4	1.1	2.2	6.2	12.9	3.6	15.6	1.0	2.0	13.7
Indiana.....	10	8	0.8	4.8	0.7	1.4	4.0	8.0	2.1	9.7	0.3	1.2	7.6
West North Central Division.....	12	10	1.1	6.6	0.9	2.0	5.0	11.9	4.1	15.4	0.5	1.1	8.6
Minnesota.....	5	5	0.4	2.8	0.3	0.7	2.0	5.6	1.1	6.7	0.1	0.4	4.0
South Atlantic Division.....	23	17	1.8	7.6	1.6	3.2	6.5	12.7	4.3	16.3	0.7	1.8	9.6
Georgia.....	17	12	1.1	5.2	1.0	2.1	4.5	8.0	3.3	10.9	0.4	1.2	6.9
East South Central and West South Central Divisions.....	9	9	0.5	2.6	0.5	0.9	2.2	4.1	2.6	6.6	0.2	1.0	4.9
Texas.....	4	4	0.2	1.1	0.2	0.4	0.8	1.7	1.6	3.2	0.1	0.2	1.7
West Region.....	10	3	0.2	1.4	0.2	0.4	1.1	2.5	1.0	3.4	0.1	0.3	2.3

See footnotes at end of table.

TABLE 2B. General Statistics for Manufacturing Establishments With Mining Operations by Geographic Area: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
DIMENSION LIMESTONE QUARRIES INCLUDED IN MANUFACTURES--Continued													
United States, total.....	25	15	1.3	8.3	1.2	2.3	6.8	13.6	2.6	16.6	0.7	1.8	12.3
North Central Region.....	21	12	1.2	7.4	1.0	2.0	6.0	12.3	3.0	14.6	0.7	1.6	10.7
Wisconsin.....	7	1	0.1	1.0	0.1	0.2	0.8	1.9	0.6	2.1	0.3	(NA)	(NA)
South and West Regions.....	4	3	0.2	0.9	0.2	0.3	0.8	1.4	0.7	2.0	(Z)	(NA)	(NA)
DIMENSION GRANITE QUARRIES INCLUDED IN MANUFACTURES													
United States, total.....	45	30	2.5	12.7	2.1	4.2	10.1	21.4	9.2	29.8	0.7	2.6	19.7
Northeast and North Central Regions....	18	11	1.1	6.3	0.8	1.8	4.7	11.1	3.8	14.6	0.3	1.1	10.2
West North Central Division.....	4	4	0.4	2.2	0.3	0.7	1.6	5.3	1.2	6.3	0.1	(NA)	(NA)
South and West Regions.....	27	19	1.4	6.5	1.3	2.4	5.4	10.3	5.4	15.2	0.4	(NA)	(NA)
DIMENSION STONE, N. E. C., QUARRIES INCLUDED IN MANUFACTURES													
United States, total.....	52	29	3.4	17.1	3.0	6.5	14.7	27.4	10.1	35.7	1.8	4.4	24.1
Northeast Region.....	33	17	1.7	8.9	1.5	3.3	7.8	12.9	4.9	17.2	0.6	1.9	11.5
Vermont.....	12	7	1.0	5.2	0.9	2.0	4.7	7.7	3.4	10.8	0.3	(NA)	(NA)
West Region.....	5	1	0.1	0.5	0.1	0.1	0.4	0.9	0.2	1.2	(Z)	(NA)	(NA)
CRUSHED AND BROKEN LIMESTONE QUARRIES INCLUDED IN MANUFACTURES													
United States, total.....	229	77	¹ 4.4	¹ 26.0	¹ 4.4	8.7	26.0	119.1	27.9	147.1	(NA)	¹ 5.0	112.2
New England Division.....	5	-	(Z)	¹ 0.3	(Z)	0.1	0.3	1.2	0.6	1.9	(NA)	¹ 0.1	3.0
East North Central Division.....	38	14	¹ 0.7	¹ 4.7	¹ 0.7	1.4	4.7	21.6	5.1	26.7	(NA)	(NA)	(NA)
Ohio.....	16	8	¹ 0.3	¹ 1.9	¹ 0.3	0.6	1.9	7.2	2.1	9.3	(NA)	(NA)	(NA)
Illinois.....	6	2	¹ 0.1	¹ 1.0	¹ 0.1	0.3	1.0	3.1	1.0	4.1	(NA)	¹ 0.2	4.4
Michigan.....	4	2	¹ 0.2	¹ 1.2	¹ 0.2	0.3	1.2	7.9	1.0	8.9	(NA)	(NA)	(NA)
West North Central Division:													
Iowa.....	6	4	¹ 0.1	¹ 0.9	¹ 0.1	0.3	0.9	4.0	1.0	5.0	(NA)	(NA)	(NA)
Missouri.....	10	3	¹ 0.3	¹ 1.8	¹ 0.3	0.6	1.8	9.1	1.3	10.4	(NA)	(NA)	(NA)
South Atlantic Division.....	22	12	¹ 0.5	¹ 2.8	¹ 0.5	1.0	2.8	14.9	3.1	18.0	(NA)	¹ 0.6	12.1
Maryland.....	4	2	¹ 0.1	¹ 0.5	¹ 0.1	0.2	0.5	2.3	0.4	2.8	(NA)	(NA)	(NA)
Virginia.....	8	5	¹ 0.2	¹ 1.0	¹ 0.2	0.4	1.0	3.8	1.0	4.8	(NA)	(NA)	(NA)
East South Central Division.....	22	6	¹ 0.3	¹ 1.9	¹ 0.3	0.7	1.9	8.7	2.2	10.9	(NA)	(NA)	(NA)
Alabama.....	11	3	¹ 0.2	¹ 0.9	¹ 0.2	0.4	0.9	4.5	1.3	5.8	(NA)	(NA)	(NA)
West South Central Division.....	28	9	¹ 0.5	¹ 2.4	¹ 0.5	0.9	2.4	14.5	4.0	18.5	(NA)	¹ 0.4	11.9
Arkansas.....	3	1	¹ 0.1	¹ 0.2	¹ 0.1	0.1	0.2	3.1	0.2	3.3	(NA)	(NA)	(NA)
Texas.....	20	6	¹ 0.3	¹ 1.5	¹ 0.3	0.6	1.5	8.9	2.4	11.3	(NA)	¹ 0.3	8.2
Mountain Division.....	26	1	¹ 0.2	¹ 1.3	¹ 0.2	0.5	1.3	6.7	1.4	8.1	(NA)	(NA)	(NA)
Arizona.....	8	-	¹ 0.1	¹ 0.4	¹ 0.1	0.2	0.4	1.4	0.7	2.1	(NA)	(NA)	(NA)
Pacific Division.....	28	10	¹ 0.6	¹ 4.1	¹ 0.6	1.2	4.1	16.0	3.7	19.7	(NA)	¹ 0.8	17.5
Washington.....	4	1	¹ 0.1	¹ 0.4	¹ 0.1	0.1	0.4	1.7	0.3	2.0	(NA)	(NA)	(NA)
California.....	18	8	¹ 0.5	¹ 3.5	¹ 0.5	1.0	3.5	13.4	3.2	16.6	(NA)	(NA)	(NA)
CRUSHED AND BROKEN GRANITE AND STONE, N. E. C. QUARRIES INCLUDED IN MANUFACTURES													
United States, total.....	12	1	¹ 0.1	¹ 0.7	¹ 0.1	0.2	0.7	3.5	0.8	4.2	(NA)	¹ 0.9	11.7
West Region (Pacific).....	5	1	¹ 0.1	¹ 0.5	¹ 0.1	0.1	0.5	2.0	0.4	2.3	(NA)	(NA)	(NA)

Note: Detailed figures may not add to the totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than 50 employees. n.e.c. Not elsewhere classified.

¹The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	1411-Dimension stone industry				142-Crushed and broken stone			
	Industry total	Dimension limestone subindustry	Dimension granite subindustry	Dimension stone, n.e.c., subindustry	Total	1422-Crushed and broken limestone industry		
						Total	Middle Atlantic	Pennsylvania
Establishments, total.....number..	244	46	50	148	2,033	1,484	174	118
With 1 to 19 employees.....do....	223	40	43	140	1,319	974	100	70
With 20 to 99 employees.....do....	20	5	7	8	668	480	64	41
With 100 employees or more.....do....	1	1	-	-	46	30	10	7
All employees (average for the year).....1,000..	1.9	0.5	0.6	0.8	43.0	30.8	5.0	3.3
Payroll (all employees), total for year..million dollars..	9.3	2.7	3.6	3.0	280.8	197.5	35.3	22.6
Production, development, and exploration workers:								
Average for the year.....1,000..	1.8	0.5	0.6	0.7	35.8	25.8	3.9	2.7
March.....do....	1.6	0.4	0.6	0.7	32.7	23.4	3.4	2.4
May.....do....	1.8	0.5	0.6	0.7	36.5	26.4	4.0	2.7
August.....do....	1.9	0.5	0.6	0.8	38.2	27.6	4.2	2.9
November.....do....	1.7	0.4	0.6	0.7	35.9	25.9	3.9	2.7
Man-hours.....millions..	3.3	0.9	1.2	1.3	80.7	58.5	8.8	6.0
January-March.....do....	0.8	0.2	0.3	0.3	17.4	12.5	1.8	1.3
April-June.....do....	0.9	0.2	0.3	0.3	20.9	15.2	2.3	1.5
July-September.....do....	0.9	0.3	0.3	0.3	22.5	16.4	2.5	1.7
October-December.....do....	0.8	0.2	0.3	0.3	19.9	14.4	2.2	1.5
Wages.....million dollars..	7.6	2.2	2.9	2.6	215.7	153.6	25.3	16.4
Supplemental labor cost not included in payroll.....do....	0.8	0.2	0.4	0.2	26.0	18.6	3.4	2.2
Legally required expenditures, including Social Security contributions.....do....	0.6	0.2	0.3	0.2	16.7	12.2	2.0	1.3
Payments for voluntary program.....do....	0.2	(Z)	0.1	(Z)	9.3	6.4	1.4	0.9
Cost of supplies, etc., total.....do....	5.2	1.5	2.1	1.5	368.4	253.1	41.5	31.2
Supplies used, minerals received for preparation, and purchased machinery.....do....	3.4	1.1	1.5	0.8	269.1	181.7	26.7	19.8
Cost of resales.....do....	0.4	(D)	(D)	0.2	(D)	9.9	4.3	4.2
Purchased fuels consumed.....do....	0.5	0.1	0.2	0.2	29.3	21.0	3.2	2.4
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	27.6	7.1	13.5	7.0	1,527.1	1,113.9	232.2	167.8
Cost.....million dollars..	0.4	(D)	(D)	0.1	(D)	18.1	3.7	2.5
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	0.4	0.2	0.1	0.2	33.3	22.4	2.7	2.2
Value of shipments and receipts (including resales), total.....do....	22.1	6.5	8.7	7.0	963.5	666.6	115.3	79.7
Value of resales.....do....	0.4	(D)	(D)	0.2	(D)	11.3	4.8	4.7
Value added in mining.....do....	18.1	5.4	6.8	5.9	704.7	492.2	84.7	56.2
Capital expenditures (except land and mineral rights), total.....do....	1.1	0.4	0.2	0.4	109.5	78.7	10.9	7.7
Mineral development and exploration.....do....	(Z)	(Z)	(Z)	(Z)	2.8	2.4	0.3	0.3
New structures and additions.....do....	0.1	(Z)	(Z)	0.1	13.1	10.0	1.7	1.4
New machinery and equipment.....do....	0.7	0.3	0.2	0.2	78.7	54.2	7.6	4.9
Used plant and equipment.....do....	0.2	0.1	(Z)	0.1	14.8	12.1	1.3	1.1
Gross book value of fixed assets, total.....do....	17.5	4.7	6.9	5.9	1,131.4	825.9	157.4	114.7
Mineral properties.....do....	2.0	0.8	0.8	0.4	73.9	54.7	12.7	5.0
Building and other structures (excluding land).....do....	3.2	0.5	1.2	1.6	194.8	141.3	36.8	29.1
Machinery and equipment.....do....	12.3	3.5	4.9	3.8	862.7	629.9	108.0	80.5
Mineral development and exploration expenditures, total.....do....	0.2	(Z)	(Z)	0.2	7.3	6.2	1.0	0.9
Capitalized.....do....	(Z)	(Z)	(Z)	(Z)	2.8	2.4	0.3	0.3
Expensed.....do....	0.2	(Z)	(Z)	0.2	4.5	3.8	0.7	0.6
Mineral rights and geological expenditures.....do....	0.1	(Z)	(Z)	(Z)	11.6	7.4	0.6	0.4
Lease and land acquisition of nonproducing acreage.....do....	(Z)	(Z)	-	-	2.9	1.9	0.2	0.2
Geological and geophysical.....do....	(Z)	(Z)	-	(Z)	0.5	0.5	0.2	0.1
Lease rents.....do....	0.1	(Z)	(Z)	(Z)	8.4	5.1	0.3	0.2
Net shipments of primary product ¹ 1,000 short tons..	1,186.1	517.3	355.7	391.4	574,522.8	436,688.4	59,944.0	40,947.3
Crude minerals mined during 1967, by ownership.....do....	1,388.1	580.9	355.7	401.5	544,802.1	405,758.5	55,258.3	36,859.5
Production for own account.....do....	340.9	262.0	39.2	39.7	201,938.9	157,057.3	29,178.7	17,558.6
Production for accounts of others.....do....	132.0	(²)	(³)	-	13,894.2	10,876.5	1,308.2	522.9
Royalty production.....do....	112.0	(²)	35.2	(⁴)	201,442.0	152,776.1	9,188.7	7,607.5
Royalties paid.....million dollars..	0.1	(Z)	(Z)	(Z)	12.4	8.5	0.6	0.4
Undistributed.....1,000 short tons..	753.1	² 318.9	³ 281.2	⁴ 361.8	127,527.0	85,048.6	15,582.7	11,170.5
Man-hours worked by production, development, and exploration workers, total..... millions..	3.3	0.9	1.2	1.3	80.7	58.5	8.8	6.0
At mines, total.....do....	3.0	0.7	1.2	1.1	49.2	36.3	5.6	3.8
Underground.....do....	-	-	-	-	2.5	2.3	0.2	0.2
Open-pit.....do....	2.8	0.7	1.2	1.0	36.7	26.5	4.0	2.7
Surface (including mine shops and yards).....do....	0.2	(Z)	-	0.1	10.0	7.5	1.4	0.9
At preparation plants.....do....	0.3	0.2	(Z)	0.1	31.5	22.2	3.2	2.2
Man-hours spent on exploration and development (included above).....do....	0.3	(D)	(D)	(D)	1.4	1.0	0.3	0.2

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	142—Crushed and broken stone—Continued									
	1422—Crushed and broken limestone industry—Continued									
	East North Central	Ohio	Indiana	Illinois	West North Central	Missouri	South Atlantic	Florida	East South Central	Tennessee
Establishments, total.....number..	391	105	74	140	363	138	177	55	199	75
With 1 to 19 employees.....do....	271	69	47	100	275	102	90	29	114	44
With 20 to 99 employees.....do....	109	32	27	39	87	36	82	22	84	31
With 100 employees or more.....do....	11	4	-	1	1	-	5	4	1	-
All employees (average for the year).....1,000..	8.4	2.5	1.4	2.4	5.1	2.0	4.7	1.6	4.2	1.5
Payroll (all employees), total for year.....million dollars..	59.2	16.0	9.3	18.0	33.0	12.3	26.5	9.1	22.8	8.0
Production, development, and exploration workers:										
Average for the year.....1,000..	7.1	2.0	1.2	2.0	4.3	1.7	4.0	1.3	3.6	1.3
March.....do....	6.2	1.9	1.1	1.9	4.0	1.6	3.9	1.3	3.3	1.2
May.....do....	7.4	2.1	1.2	2.1	4.5	1.7	4.0	1.3	3.7	1.3
August.....do....	7.8	2.1	1.3	2.1	4.6	1.8	4.1	1.3	3.8	1.3
November.....do....	7.2	2.1	1.2	2.0	4.3	1.7	4.0	1.3	3.6	1.3
Man-hours.....millions..	15.8	4.6	2.8	4.6	9.9	3.6	9.0	3.3	8.2	3.1
January-March.....do....	3.3	1.0	0.6	1.0	2.1	0.8	2.1	0.8	1.8	0.6
April-June.....do....	4.1	1.2	0.7	1.1	2.6	0.9	2.3	0.8	2.2	0.8
July-September.....do....	4.5	1.2	0.8	1.3	2.8	1.0	2.4	0.8	2.3	0.9
October-December.....do....	4.0	1.1	0.7	1.2	2.4	0.9	2.2	0.8	2.0	0.7
Wages.....million dollars..	47.5	12.4	7.7	14.2	26.1	10.0	20.2	6.9	18.3	6.5
Supplemental labor cost not included in payroll.....do....	6.2	1.6	0.8	1.4	2.9	1.1	2.3	0.6	2.0	0.7
Legally required expenditures, including Social Security contributions.....do....	3.7	1.1	0.6	0.9	2.1	0.8	1.6	0.4	1.5	0.5
Payments for voluntary program.....do....	2.5	0.5	0.3	0.5	0.8	0.3	0.8	0.2	0.6	0.2
Cost of supplies, etc., total.....do....	71.3	23.0	12.1	20.0	44.2	17.4	37.6	12.8	35.0	(D)
Supplies used, minerals received for preparation, and purchased machinery.....do....	50.8	14.7	9.3	15.4	29.5	12.3	28.9	9.5	27.1	(D)
Cost of resales.....do....	1.9	0.6	0.2	0.2	2.0	0.3	0.5	(Z)	0.8	(D)
Purchased fuels consumed.....do....	5.2	1.5	0.9	1.5	4.8	1.8	2.8	0.9	2.6	1.0
Electric energy:										
Purchased:										
Quantity.....million kw.-hrs..	329.2	95.0	49.8	82.9	80.7	31.9	191.4	73.8	159.9	(D)
Cost.....million dollars..	5.7	1.7	1.0	1.5	1.7	0.8	2.9	1.1	2.5	(D)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	7.6	4.5	0.7	1.3	6.1	2.3	2.5	1.3	1.9	(D)
Value of shipments and receipts (including resales), total.....do....	204.9	54.2	34.1	68.4	104.7	35.5	90.2	30.4	87.9	34.8
Value of resales.....do....	2.3	0.8	0.2	0.2	2.2	0.4	0.6	0.1	1.0	0.7
Value added in mining.....do....	159.2	41.0	26.9	53.7	74.0	23.7	61.7	20.0	64.2	25.2
Capital expenditures (except land and mineral rights), total.....do....	25.6	9.8	4.9	5.3	13.4	5.6	9.1	2.3	11.4	(D)
Mineral development and exploration.....do....	0.5	0.1	0.2	0.1	0.5	0.1	0.1	(Z)	0.4	(D)
New structures and additions.....do....	5.1	4.1	0.4	0.4	0.7	0.3	0.6	0.1	1.0	(D)
New machinery and equipment.....do....	17.4	4.8	3.6	4.0	8.9	3.0	6.9	1.4	7.9	(D)
Used plant and equipment.....do....	2.5	0.8	0.7	0.7	3.4	2.3	1.5	0.8	2.1	(D)
Gross book value of fixed assets, total.....do....	268.6	71.7	40.7	69.8	106.7	35.0	124.7	43.6	99.1	32.8
Mineral properties.....do....	17.6	5.5	2.8	6.1	6.1	2.2	11.3	6.2	3.2	1.1
Building and other structures (excluding land).....do....	48.2	15.4	4.7	7.2	12.2	4.5	19.0	11.6	12.6	3.9
Machinery and equipment.....do....	202.8	50.8	33.1	56.5	88.3	28.4	27.9	33.1	83.4	27.9
Mineral development and exploration expenditures, total.....do....	1.0	0.2	0.3	0.3	2.0	0.9	0.5	0.1	0.6	0.1
Capitalized.....do....	0.5	0.1	0.2	0.1	0.5	0.1	0.1	(Z)	0.4	(Z)
Expensed.....do....	0.6	0.1	0.1	0.3	1.5	0.9	0.4	0.1	0.2	(Z)
Mineral rights and geological expenditures.....do....	1.7	0.1	0.3	0.7	1.8	0.7	1.0	0.4	1.4	0.6
Lease and land acquisition of nonproducing acreage.....do....	0.4	(Z)	0.1	0.2	0.7	0.4	0.2	0.1	0.3	0.1
Geological and geophysical.....do....	0.1	-	-	(Z)	0.2	(Z)	(Z)	(Z)	0.1	(Z)
Lease rents.....do....	1.3	0.1	0.2	0.5	1.0	0.3	0.8	0.3	1.0	0.4
Net shipments of primary product ¹.....1,000 short tons..	145,075.2	40,800.6	22,217.6	45,989.2	66,063.0	21,413.0	55,347.8	19,863.3	65,143.6	27,959.5
Crude minerals mined during 1967, by ownership.....do....	133,560.0	29,488.0	20,376.9	43,117.0	64,378.9	21,205.1	53,702.5	20,436.1	58,485.1	26,158.2
Production for own account.....do....	67,007.3	18,434.5	7,522.9	24,147.3	12,749.9	4,096.0	20,742.3	7,285.0	16,159.3	6,201.2
Production for accounts of others.....do....	1,118.8	546.5	572.3	-	1,690.8	926.6	2,337.5	1,939.6	(³)	-
Royalty production.....do....	43,851.7	2,287.0	9,059.6	10,958.2	35,623.2	9,833.3	20,584.2	6,210.5	29,673.3	16,666.9
Royalties paid.....million dollars..	2.2	0.1	0.4	0.8	2.3	0.6	1.1	0.4	1.3	0.6
Undistributed.....1,000 short tons..	21,582.2	8,220.0	3,222.1	8,011.5	14,315.0	6,349.2	10,038.5	5,001.0	12,652.5	3,290.1
Man-hours worked by production, development, and exploration workers, total.....millions..	15.8	4.6	2.8	4.6	9.9	3.6	9.0	3.3	8.2	3.1
At mines, total.....do....	10.0	3.2	1.7	2.7	6.4	2.5	5.1	1.8	4.9	1.7
Underground.....do....	0.7	0.3	(Z)	0.3	0.4	0.2	0.2	(Z)	0.6	0.2
Open-pit.....do....	6.8	2.0	1.2	1.8	5.1	1.9	3.7	1.4	3.5	1.4
Surface (including mine shops and yards).....do....	2.5	0.8	0.4	0.6	0.8	0.4	1.3	0.4	0.8	0.2
At preparation plants.....do....	5.8	1.4	1.1	1.9	3.5	1.1	3.9	1.5	3.3	1.3
Man-hours spent on exploration and development (included above).....do....	0.1	(Z)	(Z)	0.1	0.2	0.1	0.1	(Z)	0.1	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967-Continued

Item	142-Crushed and broken stone-Continued				1423-Crushed and broken granite				
	1422-Crushed and broken limestone industry-Continued				Total	Northeast and North Central	South	Virginia	North Carolina
	West South Central	Texas	Mountain	Pacific					
Establishments, total.....number..	71	32	37	51	149	26	105	21	45
With 1 to 19 employees.....do....	33	13	32	44	69	19	36	9	20
With 20 to 99 employees.....do....	36	17	5	7	75	7	66	12	25
With 100 employees or more.....do....	2	2	-	-	5	-	3	-	-
All employees (average for the year).....1,000..	2.2	1.3	0.4	0.6	4.5	0.4	3.7	0.5	1.0
Payroll (all employees), total for year..million dollars..	12.4	7.8	2.4	4.0	27.1	3.2	20.4	2.9	5.2
Production, development, and exploration workers:									
Average for the year.....1,000..	1.8	1.0	0.3	0.5	3.9	0.3	3.2	0.4	0.9
March.....do....	1.7	0.9	0.3	0.5	3.8	0.2	3.2	0.4	0.9
May.....do....	1.9	1.0	0.3	0.5	4.0	0.4	3.3	0.4	1.0
August.....do....	2.0	1.1	0.4	0.6	4.0	0.4	3.3	0.5	0.9
November.....do....	1.8	1.0	0.3	0.5	3.8	0.4	3.1	0.4	0.8
Man-hours.....millions..	4.5	2.6	0.7	1.0	8.9	0.7	7.5	0.9	2.2
January-March.....do....	1.0	0.6	0.1	0.3	2.1	0.1	1.8	0.2	0.5
April-June.....do....	1.2	0.7	0.2	0.3	2.3	0.2	2.0	0.2	0.6
July-September.....do....	1.2	0.7	0.2	0.3	2.4	0.2	2.0	0.2	0.6
October-December.....do....	1.1	0.6	0.1	0.3	2.1	0.2	1.8	0.2	0.5
Wages.....million dollars..	9.3	5.2	2.1	3.4	22.0	2.4	16.7	2.4	4.5
Supplemental labor cost not included in payroll.....do....	1.1	0.7	0.3	0.4	2.6	0.3	2.0	0.3	0.5
Legally required expenditures, including Social Security contributions.....do....	0.9	0.5	0.2	0.3	1.5	0.2	1.1	0.2	0.3
Payments for voluntary program.....do....	0.2	0.1	0.1	0.1	1.1	0.1	0.9	0.2	0.2
Cost of supplies, etc., total.....do....	14.8	9.6	2.0	4.9	47.1	3.5	41.0	5.2	10.3
Supplies used, minerals received for preparation, and purchased machinery.....do....	11.4	7.7	1.4	3.7	39.5	2.1	35.6	3.9	9.0
Cost of resales.....do....	0.2	0.2	(Z)	0.1	(D)	(D)	(D)	-	-
Purchased fuels consumed.....do....	1.4	0.8	0.3	0.5	2.2	0.3	1.7	0.2	0.5
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	93.0	56.8	7.1	12.6	165.6	14.8	142.2	19.8	26.1
Cost.....million dollars..	1.0	0.6	0.1	0.2	(D)	(D)	(D)	0.4	0.4
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	0.8	0.4	0.3	0.3	2.9	0.8	1.7	0.8	0.3
Value of shipments and receipts (including resales), total.....do....	39.1	22.7	7.3	12.5	114.2	9.0	94.5	13.8	25.4
Value of resales.....do....	0.2	0.2	(Z)	0.1	(D)	(D)	(D)	-	-
Value added in mining.....do....	29.9	17.1	5.8	9.4	80.1	6.2	65.2	10.5	18.6
Capital expenditures (except land and mineral rights), total.....do....									
Mineral development and exploration.....do....	5.6	4.0	0.5	1.7	13.0	0.6	11.7	1.8	3.4
New structures and additions.....do....	0.6	0.6	(Z)	(Z)	(Z)	(Z)	(Z)	-	(Z)
New machinery and equipment.....do....	0.4	0.3	(Z)	0.4	1.1	0.1	0.8	(Z)	0.4
Used plant and equipment.....do....	3.8	2.9	0.3	1.0	11.1	0.3	10.3	1.8	2.8
Gross book value of fixed assets, total.....do....	0.9	0.2	0.1	0.3	0.7	0.2	0.5	(Z)	0.3
Mineral properties.....do....	42.1	23.7	9.0	12.4	125.4	8.8	107.6	16.2	26.3
Building and other structures (excluding land).....do....	1.4	0.8	1.7	0.4	6.5	0.9	5.2	0.2	2.4
Machinery and equipment.....do....	7.7	1.4	1.6	2.0	19.1	1.3	16.8	1.8	3.7
Mineral development and exploration expenditures, total.....do....	33.1	21.5	5.7	10.1	99.8	6.5	85.5	14.3	20.2
Capitalized.....do....	0.6	0.6	(Z)	(Z)	0.1	(Z)	0.1	(Z)	(Z)
Expensed.....do....	0.6	0.6	(Z)	(Z)	(Z)	(Z)	(Z)	-	(Z)
Mineral rights and geological expenditures.....do....	(Z)	(Z)	(Z)	(Z)	0.1	-	0.1	(Z)	-
Lease and land acquisition of nonproducing acreage.....do....	0.6	0.4	(Z)	0.3	2.5	0.9	1.2	0.2	0.7
Geological and geophysical.....do....	0.2	0.2	(Z)	(Z)	0.4	0.1	0.3	-	0.3
Lease rents.....do....	-	-	-	(Z)	(Z)	(Z)	-	-	-
Net shipments of primary product ¹.....1,000 short tons..	0.5	0.3	(Z)	0.2	2.1	0.8	0.9	0.2	0.4
Crude minerals mined during 1967, by ownership.....do....	29,620.2	17,239.7	4,165.4	8,885.5	61,387.2	4,822.2	50,745.8	(NA)	(NA)
Production for own account.....do....	31,214.9	20,255.6	3,280.5	4,387.9	65,198.8	5,986.6	54,210.1	8,764.9	16,920.2
Production for accounts of others.....do....	8,736.1	4,094.0	(⁵)	(⁶)	22,319.0	1,757.1	20,550.2	(⁵)	8,055.5
Royalty production.....do....	4,041.6	3,011.8	202.4	(⁶)	(³)	(³)	(³)	-	-
Royalties paid.....million dollars..	(⁴)	9,108.9	(⁵)	1,367.3	27,643.2	2,854.5	22,583.6	(⁵)	7,208.2
Undistributed.....1,000 short tons..	(D)	0.5	(D)	0.2	2.2	(D)	1.1	0.5	(D)
Man-hours worked by production, development, and exploration workers, total.....millions..	⁴ 18,437.2	⁴ 4,040.9	⁵ 3,078.1	⁶ 3,020.6	³ 15,236.6	³ 1,374.9	³ 11,076.3	⁵ 8,764.9	1,656.5
At mines, total.....do....	4.5	2.6	0.7	1.0	8.9	0.7	7.5	0.9	2.2
Underground.....do....	2.9	1.6	0.5	0.6	5.9	0.5	5.0	0.6	1.4
Open-pit.....do....	0.1	-	0.1	0.1	(Z)	(Z)	(Z)	-	-
Surface (including mine shops and yards).....do....	2.4	1.3	0.3	0.4	4.3	0.3	3.6	0.5	1.1
At preparation plants.....do....	0.4	0.4	0.1	0.1	1.5	0.1	1.3	0.2	0.3
Man-hours spent on exploration and development (included above).....do....	1.6	1.0	0.2	0.3	3.0	0.3	2.5	0.3	0.7
See footnotes at end of table.	0.2	0.2	(Z)	0.1	(D)	(D)	(D)	(D)	(D)

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967-Continued

Item	1423-Crushed and broken granite-Con.		1429-Crushed and broken stone, n.e.c.						
	Georgia	West	Total	New England	Middle Atlantic	New Jersey	East North Central	Wisconsin	West North Central
Establishments, total.....number..	22	18	400	21	77	(D)	38	(D)	32
With 1 to 19 employees.....do....	2	14	276	16	42	(D)	29	(D)	23
With 20 to 99 employees.....do....	19	2	113	5	28	(D)	9	(D)	9
With 100 employees or more.....do....	1	2	11	-	7	(D)	-	-	-
All employees (average for the year).....1,000..	1.1	0.4	7.7	0.4	2.3	(D)	0.6	(D)	0.4
Payroll (all employees), total for year..million dollars..	6.1	3.5	56.2	3.9	19.2	(D)	4.8	(D)	2.8
Production, development, and exploration workers:									
Average for the year.....1,000..	1.0	0.3	6.1	0.3	1.8	(D)	0.3	(D)	0.3
March.....do....	1.0	0.3	5.5	0.3	1.6	(D)	0.2	(D)	0.3
May.....do....	1.0	0.3	6.1	0.3	1.9	(D)	0.3	(D)	0.3
August.....do....	1.0	0.3	6.6	0.4	2.0	(D)	0.3	(D)	0.4
November.....do....	1.0	0.4	6.2	0.3	1.8	(D)	0.3	(D)	0.3
Man-hours.....millions..	2.4	0.7	13.3	0.7	4.0	(D)	0.7	(D)	0.7
January-March.....do....	0.6	0.2	2.8	0.1	0.8	(D)	0.1	(D)	0.1
April-June.....do....	0.6	0.2	3.4	0.2	1.1	(D)	0.2	(D)	0.2
July-September.....do....	0.6	0.2	3.7	0.2	1.2	(D)	0.2	(D)	0.2
October-December.....do....	0.6	0.2	3.4	0.2	1.0	(D)	0.2	(D)	0.2
Wages.....million dollars..	5.1	2.8	40.1	2.6	13.2	(D)	1.9	(D)	1.9
Supplemental labor cost not included in payroll....do....	0.6	0.3	4.8	0.4	1.7	(D)	0.3	(D)	0.2
Legally required expenditures, including Social Security contributions.....do....	0.3	0.2	3.0	0.2	1.0	(D)	0.2	(D)	0.1
Payments for voluntary program.....do....	0.3	0.1	1.8	0.2	0.7	(D)	0.1	(D)	(Z)
Cost of supplies, etc., total.....do....	11.1	2.6	68.2	3.6	21.6	(D)	4.6	(D)	2.7
Supplies used, minerals received for preparation, and purchased machinery.....do....	9.7	1.8	47.9	2.8	16.0	(D)	3.1	(D)	1.7
Cost of resales.....do....	(D)	(D)	(D)	(Z)	0.2	(D)	0.2	(D)	(D)
Purchased fuels consumed.....do....	0.5	0.2	6.1	0.2	1.6	(D)	0.4	(D)	0.4
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	54.8	8.6	247.6	22.3	88.6	(D)	14.0	(D)	5.9
Cost.....million dollars..	0.8	(D)	(D)	0.4	1.7	(D)	0.5	(D)	(D)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Contract work.....million dollars..	(D)	0.4	8.0	0.3	2.0	(D)	0.5	(D)	0.2
Value of shipments and receipts (including resales), total.....do....	27.7	10.7	182.7	11.4	62.4	(D)	11.3	(D)	7.7
Value of resales.....do....	(D)	(D)	(D)	(Z)	0.2	(D)	0.2	(D)	0.3
Value added in mining.....do....	20.2	8.8	132.4	9.0	46.0	(D)	7.4	(D)	5.7
Capital expenditures (except land and mineral rights), total.....do....	3.7	0.7	17.8	1.2	5.1	(D)	0.7	(D)	0.7
Mineral development and exploration.....do....	(Z)	(Z)	0.4	(Z)	0.1	(D)	(Z)	(D)	(Z)
New structures and additions.....do....	0.1	0.3	2.0	0.5	0.2	(D)	0.1	(D)	0.1
New machinery and equipment.....do....	3.3	0.4	13.4	0.7	4.4	(D)	0.6	(D)	0.5
Used plant and equipment.....do....	0.2	(Z)	2.0	0.1	0.4	(D)	(Z)	(D)	0.1
Gross book value of fixed assets, total.....do....	38.4	9.0	180.1	14.5	57.9	(D)	12.3	(D)	8.1
Mineral properties.....do....	1.4	0.3	12.7	0.3	5.7	(D)	1.2	(D)	0.5
Building and other structures (excluding land).....do....	5.2	0.9	34.4	3.9	9.5	(D)	2.7	(D)	2.2
Machinery and equipment.....do....	31.8	7.8	133.0	10.3	42.8	(D)	8.4	(D)	5.3
Mineral development and exploration expenditures, total.....do....	(Z)	0.1	1.0	0.1	0.2	(D)	0.2	(D)	(Z)
Capitalized.....do....	(Z)	(Z)	0.4	(Z)	0.1	(D)	(Z)	(D)	(Z)
Expensed.....do....	(Z)	(Z)	0.6	(Z)	0.1	(D)	0.1	(D)	(Z)
Mineral rights and geological expenditures.....do....	0.2	0.4	1.7	(Z)	0.2	(D)	0.2	(D)	0.2
Lease and land acquisition of nonproducing acreage.....do....	-	-	0.6	(Z)	(Z)	(D)	0.1	(D)	0.2
Geological and geophysical.....do....	-	-	(Z)	-	-	(D)	-	(D)	-
Lease rents.....do....	0.2	0.4	1.2	(Z)	0.2	(D)	0.1	(D)	(Z)
Net shipments of primary product ¹.....1,000 short tons..	17,266.4	5,819.2	76,457.2	6,444.6	26,118.3	(D)	3,829.5	(D)	3,828.7
Crude minerals mined during 1967, by ownership.....do....	17,612.5	5,002.0	73,844.8	6,841.1	22,103.6	(D)	4,630.8	(D)	3,662.4
Production for own account.....do....	(7)	(8)	22,562.6	3,868.6	9,254.7	(D)	1,278.9	(D)	839.5
Production for accounts of others.....do....	(7)	-	(3)	-	(3)	(D)	(3)	(D)	-
Royalty production.....do....	(7)	2,205.1	21,022.7	(4)	1,880.0	(D)	783.2	(D)	1,907.9
Royalties paid.....million dollars..	(D)	(D)	1.7	(D)	0.2	(D)	(D)	(D)	0.1
Undistributed.....1,000 short tons..	³ 17,612.5	⁸ 2,796.9	³ 30,259.5	⁴ 2,972.5	³ 10,968.9	(D)	³ 2,568.7	(D)	914.9
Man-hours worked by production, development, and exploration workers, total.....millions..	2.4	0.7	13.3	0.7	4.0	(D)	0.7	(D)	0.7
At mines, total.....do....	1.5	0.4	7.0	0.5	2.2	(D)	0.4	(D)	0.4
Underground.....do....	-	(Z)	0.2	(Z)	-	(D)	-	(D)	(Z)
Open-pit.....do....	1.1	0.3	5.9	0.3	1.9	(D)	0.3	(D)	0.4
Surface (including mine shops and yards).....do....	0.4	0.1	1.0	0.2	0.3	(D)	0.1	(D)	(Z)
At preparation plants.....do....	0.9	0.3	6.3	0.3	1.8	(D)	0.2	(D)	0.3
Man-hours spent on exploration and development (included above).....do....	(D)	(D)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1429—Crushed and broken stone, n.e.c.—Continued								
	South Atlantic	Virginia	North Carolina	Georgia	East South Central	West South Central	West	Oregon	California
Establishments, total.....number..	87	18	15	8	(D)	(D)	145	48	50
With 1 to 19 employees.....do....	46	8	9	1	(D)	(D)	120	41	40
With 20 to 99 employees.....do....	37	10	6	5	(D)	(D)	25	7	10
With 100 employees or more.....do....	4	-	-	2	(D)	(D)	-	-	-
All employees (average for the year).....1,000..	2.4	0.4	0.3	0.5	(D)	(D)	1.5	0.4	0.6
Payroll (all employees), total for year..million dollars..	13.8	2.5	1.5	2.8	(D)	(D)	11.8	2.6	5.4
Production, development, and exploration workers:									
Average for the year.....1,000..	2.1	0.3	0.3	0.4	(D)	(D)	1.3	0.3	0.5
March.....do....	1.9	0.3	0.3	0.4	(D)	(D)	1.2	0.3	0.5
May.....do....	2.0	0.3	0.3	0.4	(D)	(D)	1.2	0.4	0.5
August.....do....	2.3	0.3	0.3	0.4	(D)	(D)	1.4	0.4	0.5
November.....do....	2.1	0.3	0.3	0.4	(D)	(D)	1.3	0.3	0.5
Man-hours.....millions..	4.7	0.8	0.6	1.0	(D)	(D)	2.5	0.7	1.0
January-March.....do....	1.1	0.2	0.1	0.3	(D)	(D)	0.6	0.2	0.2
April-June.....do....	1.1	0.2	0.1	0.3	(D)	(D)	0.6	0.2	0.2
July-September.....do....	1.2	0.2	0.2	0.2	(D)	(D)	0.7	0.2	0.3
October-December.....do....	1.2	0.2	0.2	0.2	(D)	(D)	0.6	0.2	0.3
Wages.....million dollars..	10.7	1.7	1.3	2.2	(D)	(D)	9.9	2.2	4.5
Supplemental labor cost not included in payroll.....do....	1.1	0.2	0.1	0.2	(D)	(D)	1.1	0.2	0.6
Legally required expenditures, including Social Security contributions.....do....	0.7	0.1	0.1	0.1	(D)	(D)	0.7	0.2	0.3
Payments for voluntary programs.....do....	0.4	0.1	(Z)	0.1	(D)	(D)	0.4	(Z)	0.2
Cost of supplies, etc., total.....do....	21.4	3.9	3.8	3.8	(D)	(D)	14.2	3.2	6.4
Supplies used, minerals received for preparation, and purchased machinery.....do....	14.1	2.4	2.9	2.7	(D)	(D)	10.2	2.1	4.6
Cost of resales.....do....	(D)	(Z)	(Z)	0.6	(D)	(D)	0.3	(Z)	0.1
Purchased fuels consumed.....do....	2.3	0.9	0.6	0.3	(D)	(D)	1.0	0.4	0.3
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	86.4	17.4	12.9	17.5	(D)	(D)	30.6	2.5	15.4
Cost.....million dollars..	(D)	0.2	0.2	0.2	(D)	(D)	0.6	0.1	0.3
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(D)	(D)	(NA)	(NA)	(NA)
Contract work.....million dollars..	2.8	0.3	0.1	(Z)	(D)	(D)	2.1	0.6	1.0
Value of shipments and receipts (including resales), total.....do....	50.6	9.3	7.1	9.7	(D)	(D)	39.4	9.4	18.8
Value of resales.....do....	(D)	(Z)	(Z)	0.7	(D)	(D)	0.4	(Z)	0.2
Value added in mining.....do....	34.5	6.5	4.2	7.1	(D)	(D)	29.9	7.0	14.0
Capital expenditures (except land and mineral rights), total.....do....	5.4	1.2	1.0	1.2	(D)	(D)	4.7	0.8	1.6
Mineral development and exploration.....do....	0.1	(Z)	(Z)	0.1	(D)	(D)	0.1	(Z)	(Z)
New structures and additions.....do....	0.7	(Z)	0.1	(Z)	(D)	(D)	0.4	0.1	0.1
New machinery and equipment.....do....	3.8	0.8	0.8	1.1	(D)	(D)	3.5	0.5	1.2
Used plant and equipment.....do....	0.7	0.4	0.1	(Z)	(D)	(D)	0.7	0.3	0.3
Gross book value of fixed assets, total.....do....	49.0	9.7	6.7	7.3	(D)	(D)	38.3	7.1	18.1
Mineral properties.....do....	3.4	0.7	0.4	0.1	(D)	(D)	1.6	0.3	0.7
Building and other structures (excluding land).....do....	8.5	2.1	1.3	1.0	(D)	(D)	7.5	1.2	2.9
Machinery and equipment.....do....	37.0	6.9	5.1	6.2	(D)	(D)	29.2	5.6	14.6
Mineral development and exploration expenditures, total.....do....	0.1	0.1	(Z)	0.1	(D)	(D)	0.3	0.1	(Z)
Capitalized.....do....	0.1	(Z)	(Z)	0.1	(D)	(D)	0.1	(Z)	(Z)
Expensed.....do....	0.1	0.1	(Z)	-	(D)	(D)	0.2	(Z)	(Z)
Mineral rights and geological expenditures.....do....	0.3	0.1	0.1	(Z)	(D)	(D)	0.9	0.1	0.4
Lease and land acquisition of nonproducing acreage.....do....	0.1	-	0.1	(Z)	(D)	(D)	0.2	(Z)	(Z)
Geological and geophysical.....do....	-	-	-	-	(D)	(D)	(Z)	(Z)	-
Lease rents.....do....	0.2	0.1	(Z)	(Z)	(D)	(D)	0.7	0.1	0.4
Net shipments of primary product ¹.....1,000 short tons..	18,313.8	(D)	(D)	(D)	(D)	(D)	17,922.3	4,278.7	9,326.2
Crude minerals mined during 1967, by ownership.....do....	18,893.0	3,645.6	3,555.7	1,504.2	(D)	(D)	17,713.9	3,926.3	9,906.2
Production for own account.....do....	5,288.3	499.0	(⁵)	(⁵)	(D)	(D)	2,032.6	(⁶)	1,582.5
Production for accounts of others.....do....	(³)	(²)	-	-	(D)	(D)	(³)	(⁶)	-
Royalty production.....do....	6,599.6	(²)	(⁵)	(⁵)	(D)	(D)	9,037.7	881.3	6,754.5
Royalties paid.....million dollars..	0.4	(D)	(D)	(D)	(D)	(D)	0.9	0.1	0.6
Undistributed.....1,000 short tons..	³ 7,005.1	² 3,146.6	⁵ 3,555.7	⁵ 1,504.2	(D)	(D)	⁶ 6,643.6	⁶ 3,045.0	1,569.1
Man-hours worked by production, development, and exploration workers, total.....millions..	4.7	0.8	0.6	1.0	(D)	(D)	2.5	0.7	1.0
At mines, total.....do....	2.2	0.5	0.3	0.3	(D)	(D)	1.3	0.4	0.5
Underground.....do....	0.1	-	-	0.1	(D)	(D)	(Z)	(Z)	(Z)
Open-pit.....do....	1.9	0.4	0.2	0.1	(D)	(D)	1.1	0.3	0.4
Surface (including mine shops and yards).....do....	0.2	0.1	(Z)	(Z)	(D)	(D)	0.2	0.1	0.1
At preparation plants.....do....	2.5	0.3	0.3	0.7	(D)	(D)	1.2	0.3	0.4
Man-hours spent on exploration and development (included above).....do....	(Z)	(Z)	(Z)	-	(D)	(D)	0.1	0.1	(Z)

Standard notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry or subindustry. Net shipments represents gross shipments less stone received for crushing.²Production for accounts of others and royalty production are included with undistributed production.³Production for accounts of others is included with undistributed production.⁴Royalty production is included with undistributed production.⁵Production for own account and royalty production are included with undistributed production.⁶Production for own account and production for accounts of others are included with undistributed production.⁷Production for own account, production for accounts of others, and royalty production are included with undistributed production.⁸Production for own account is included with undistributed production.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	1422-Crushed and broken limestone industry					1423-Crushed and broken granite industry		1429-Crushed and broken stone, n.e.c.	
	All types of establishments, total	Open quarries with crushing plants	Combination open and underground quarries with crushing plants	Underground quarries with crushing plants	Separately operated preparation plants	All types of establishments, total	Open quarries with crushing plants	All types of establishments, total	Open quarries with crushing plants
Establishments, total.....number..	1,484	1,287	18	60	21	149	135	400	325
With 1 to 19 employees.....do....	974	857	3	25	14	69	57	276	218
With 20 to 99 employees.....do....	480	403	13	35	7	75	73	113	98
With 100 employees or more.....do....	30	27	2	-	-	5	5	11	9
All employees (Average for the year).....1,000..	30.8	26.5	0.9	1.6	0.3	4.5	4.3	7.7	6.5
Payroll (all employees), total for year..million dollars..	197.5	168.6	6.2	9.1	2.1	27.1	25.5	56.2	46.2
Production, development, and exploration workers:									
Average for the year.....1,000..	25.8	22.7	0.8	1.4	0.3	3.9	3.8	6.1	5.5
March.....do....	23.4	20.5	0.8	1.3	0.3	3.8	3.7	5.5	4.9
May.....do....	26.4	23.2	0.8	1.4	0.3	4.0	3.8	6.1	5.5
August.....do....	27.6	24.3	0.8	1.4	0.3	4.0	3.9	6.6	6.0
November.....do....	25.9	22.7	0.8	1.4	0.3	3.8	3.7	6.2	5.5
Man-hours.....millions..	58.5	51.5	1.8	2.9	0.7	8.9	8.7	13.3	12.0
January-March.....do....	12.5	10.9	0.4	0.6	0.2	2.1	2.1	2.8	2.5
April-June.....do....	15.2	13.4	0.5	0.7	0.2	2.3	2.3	3.4	3.1
July-September.....do....	16.4	14.4	0.5	0.8	0.2	2.4	2.3	3.7	3.4
October-December.....do....	14.4	12.7	0.4	0.8	0.2	2.1	2.1	3.4	3.1
Wages.....million dollars..	153.6	135.2	4.9	7.6	1.8	22.0	21.2	40.1	36.5
Supplemental labor cost not included in payroll.....do....	18.6	16.2	0.7	1.1	0.2	2.6	2.5	4.8	4.4
Legally required expenditures, including Social Security contributions.....do....	12.2	10.7	0.4	0.8	0.1	1.5	1.5	3.0	2.7
Payments for voluntary programs.....do....	6.4	5.6	0.3	0.3	(Z)	1.1	1.0	1.8	1.7
Cost of supplies, etc., total.....do....	253.1	219.8	6.3	10.5	7.9	47.1	46.0	68.2	62.1
Supplies used, minerals received for preparation, and purchased machinery.....do....	181.7	159.9	4.5	7.9	6.1	39.5	38.8	47.9	43.6
Cost of resales.....do....	9.9	8.9	(Z)	0.2	0.7	(D)	(D)	(D)	(D)
Purchased fuels consumed.....do....	21.0	18.7	0.6	0.8	0.4	2.2	2.1	6.1	5.7
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	1,113.9	972.2	36.6	55.5	24.6	165.6	163.6	247.6	224.3
Cost.....million dollars..	18.1	15.8	0.6	1.0	0.3	(D)	(D)	(D)	(D)
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	22.4	16.5	0.6	0.5	0.4	2.9	2.6	8.0	7.7
Value of shipments and receipts (including resales), total.....do....	666.6	592.2	15.3	30.0	12.8	114.2	110.3	182.7	165.6
Value of resales.....do....	11.3	10.0	(Z)	0.4	0.8	(D)	(D)	(D)	(D)
Value added in mining.....do....	492.2	440.1	10.7	22.9	5.8	80.1	77.3	132.4	119.5
Capital expenditures (except land and mineral rights), total.....do....	78.7	67.8	1.7	3.4	0.9	13.0	13.0	17.8	16.0
Mineral development and exploration.....do....	2.4	2.2	0.1	(Z)	(Z)	(Z)	(Z)	0.4	0.3
New structures and additions.....do....	10.0	5.2	0.1	0.7	0.3	1.1	1.1	2.0	1.6
New machinery and equipment.....do....	54.2	49.3	1.3	2.4	0.4	11.1	11.1	13.4	12.2
Used plant and equipment.....do....	12.1	11.1	0.2	0.3	0.3	0.7	0.7	2.0	1.9
Gross book value of fixed assets, total.....do....	825.9	738.9	21.1	32.5	8.3	125.4	122.3	180.1	166.2
Mineral properties.....do....	54.7	49.3	1.6	2.1	0.2	6.5	5.9	12.7	12.2
Building and other structures (excluding land).....do....	141.3	126.7	1.0	4.2	1.1	19.1	18.7	34.4	30.7
Machinery and equipment.....do....	629.9	563.0	18.5	26.2	7.0	99.8	97.6	133.0	123.2
Mineral development and exploration expenditures, total.....do....	6.2	5.3	0.2	(Z)	(Z)	0.1	0.1	1.0	0.8
Capitalized.....do....	2.4	2.2	0.1	(Z)	(Z)	(Z)	(Z)	0.4	0.3
Expensed.....do....	3.8	3.1	0.1	(Z)	-	0.1	0.1	0.6	0.5
Mineral rights and geological expenditures.....do....	7.4	6.5	0.1	0.5	(Z)	2.5	2.3	1.7	1.4
Lease and land acquisition of nonproducing acreage.....do....	1.9	1.5	(Z)	0.4	-	0.4	0.4	0.6	0.6
Geological and geophysical.....do....	0.5	0.5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Lease rents.....do....	5.1	4.6	0.1	0.1	(Z)	2.1	1.9	1.2	0.8
Net shipments of primary product ¹ 1,000 short tons..	436,688.4	(NA)	(NA)	(NA)	(NA)	61,387.2	(NA)	76,457.2	(NA)
Crude minerals mined during 1967, by ownership.....do....	405,785.5	² 380,388.8	8,523.2	16,896.5	(³)	65,198.8	(D)	73,844.8	69,036.0
Production for own account.....do....	157,057.3	² 143,976.2	5,486.3	7,549.8	-	22,319.0	(D)	22,562.6	(⁴)
Production for accounts of others.....do....	10,876.5	² 10,380.2	-	496.3	-	(⁵)	(D)	(⁵)	(⁴)
Royalty production.....do....	152,776.1	² 145,167.8	1,139.5	6,468.8	-	27,643.2	(D)	21,022.7	(⁴)
Royalties paid.....million dollars..	8.5	² 8.1	0.1	0.3	-	2.2	(D)	1.7	(D)
Undistributed.....1,000 short tons..	85,048.6	² 80,814.6	1,897.4	2,336.6	(³)	⁵ 15,236.6	(D)	⁵ 30,259.5	⁴ 69,036.0
Man-hours worked by production, development, and exploration workers, total.....millions..	58.5	51.5	1.8	2.9	0.7	8.9	8.7	13.3	12.0
At mines, total.....do....	36.3	31.7	1.3	1.9	-	5.9	(NA)	7.0	6.4
Underground.....do....	2.3	-	0.7	1.6	-	(Z)	(Z)	0.2	-
Open-pit.....do....	26.5	24.9	0.3	-	-	4.3	(NA)	5.9	5.5
Surface (including mine shops and yards).....do....	7.5	6.7	0.3	0.3	-	1.5	(NA)	1.0	0.9
At preparation plants.....do....	22.2	19.8	0.5	1.0	0.7	3.0	(NA)	6.3	5.6
Man-hours spent on exploration and development (included above).....do....	1.0	0.9	(Z)	0.1	-	(D)	(D)	(D)	(D)

Standard notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry. Net shipments represents gross shipments less stone received for crushing.²Figures include data for all other types of operations not listed in this table.³Figures for separately operated preparation plants are included with open quarries with crushing plants.⁴Production for own account, production for accounts of others, and royalty production are included with undistributed production.⁵Production for accounts of others is included with undistributed production.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1411	Dimension stone:										
	Establishments, total.....	244	1.9	9.3	1.8	3.3	7.6	18.1	5.2	22.1	1.1
	Establishments with an average of-										
	0 to 4 employees.....	139	.2	.9	.2	.4	.8	2.7	.8	3.2	.3
	5 to 9 employees.....	51	.4	1.6	.3	.6	1.3	3.0	1.0	3.7	.3
	10 to 19 employees.....	33	.4	2.1	.4	.7	1.5	3.5	1.1	4.4	.3
	20 to 49 employees.....	15	.5	2.3	.4	.8	1.9	3.4	1.1	4.4	.1
	50 to 99 employees.....	5	.5	2.6	.4	.8	2.1	5.4	1.1	6.4	.2
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	85	.1	.4	.1	.2	.4	1.6	.5	1.9	.2
	Dimension limestone subindustry:										
	Establishments, total.....	46	.5	2.7	.5	.9	2.2	5.4	1.5	6.5	.4
	Establishments with an average of-										
	0 to 4 employees.....	20	(Z)	.1	(Z)	.1	.1	.3	.1	.4	(Z)
	5 to 9 employees.....	14	.1	.4	.1	.2	.3	.8	.4	1.0	.1
	10 to 19 employees.....	6	.1	.4	.1	.1	.3	1.0	.3	1.2	.1
	20 to 49 employees.....	4	.3	1.8	.3	.6	1.5	3.3	.7	3.9	.1
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	11	(Z)	(X)	(Z)	(Z)	(Z)	.1	(Z)	.1	(Z)
	Dimension granite subindustry:										
	Establishments, total.....	50	.6	3.6	.6	1.2	2.9	6.8	2.1	8.7	.2
	Establishments with an average of-										
	0 to 4 employees.....	13	(Z)	.1	(Z)	.1	.1	.3	.2	.5	(Z)
	5 to 9 employees.....	20	.1	.6	.1	.3	.6	1.3	.4	1.6	.1
	10 to 19 employees.....	10	.1	.9	.1	.2	.5	1.0	.5	1.5	(Z)
	20 to 49 employees.....	4	.3	2.1	.3	.6	1.7	4.0	1.0	5.0	.1
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	5	(Z)	.1	(Z)	(Z)	.1	.2	.1	.3	(Z)
	Dimension stone, n.e.c. subindustry:										
	Establishments, total.....	148	.8	3.0	.7	1.3	2.6	5.9	1.5	7.0	.4
	Establishments with an average of-										
	0 to 4 employees.....	106	.2	.7	.2	.3	.6	2.1	.5	2.4	.2
	5 to 9 employees.....	17	.1	.6	.1	.2	.4	.9	.2	1.1	.1
	10 to 19 employees.....	17	.2	.8	.2	.3	.7	1.5	.3	1.7	.1
	20 to 49 employees.....	7	.3	1.0	.3	.5	.9	1.4	.5	1.8	(Z)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	-	-	-	-	-	-	-	-	-	-
	250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	69	.1	.3	.1	.1	.3	1.2	.3	1.4	.1
1422	Crushed and broken limestone:										
	Establishments, total.....	1,484	30.8	197.5	25.8	58.5	153.6	492.2	253.1	666.6	78.7
	Establishments with an average of-										
	0 to 4 employees.....	324	.5	3.2	.5	1.0	2.7	11.3	5.9	15.5	1.7
	5 to 9 employees.....	202	1.4	8.3	1.2	2.6	6.5	23.8	14.8	34.1	4.5
	10 to 19 employees.....	448	6.4	39.2	5.5	12.3	31.6	106.1	51.0	139.5	17.7
	20 to 49 employees.....	394	11.5	72.7	9.7	22.2	56.5	173.7	93.5	237.9	29.3
	50 to 99 employees.....	86	5.7	37.3	4.7	10.7	28.0	87.6	40.4	117.2	10.8
	100 to 249 employees.....	25	3.6	25.5	3.1	7.2	20.3	64.0	33.5	87.0	10.6
	250 to 499 employees.....	5	1.7	11.3	1.2	2.6	8.0	25.7	13.9	35.4	4.2
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	184	.2	1.2	.2	.4	1.1	4.4	2.5	6.4	.5

See footnotes at end of table.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967—Continued

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1423	Crushed and broken granite:										
	Establishments, total.....	149	4.5	27.1	3.9	8.9	22.0	80.1	47.1	114.2	13.0
	Establishments with an average of-										
	0 to 4 employees.....	21	(Z)	0.1	(Z)	(Z)	0.1	0.7	0.3	1.0	(Z)
	5 to 9 employees.....	15	0.1	0.7	0.1	0.2	0.6	1.5	0.7	2.0	.3
	10 to 19 employees.....	33	0.5	3.3	0.4	0.9	2.2	7.9	4.0	10.4	1.4
	20 to 49 employees.....	57	1.8	10.1	1.6	3.7	8.5	34.0	19.2	46.7	6.5
	50 to 99 employees.....	18	1.2	7.3	1.1	2.6	6.2	19.9	12.7	28.8	3.9
	100 to 249 employees.....	4	0.8	5.7	0.7	1.5	4.6	16.0	10.1	25.3	0.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	7	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.2	(Z)
1429	Crushed and broken stone, n.e.c.:										
	Establishments, total.....	400	7.7	56.2	6.1	13.3	40.1	132.4	68.2	182.7	17.8
	Establishments with an average of-										
	0 to 4 employees.....	115	0.2	1.1	0.2	0.4	0.9	4.2	3.6	7.3	0.5
	5 to 9 employees.....	69	0.5	3.4	0.4	0.8	2.5	8.7	3.7	11.2	1.2
	10 to 19 employees.....	92	1.3	9.0	1.1	2.1	6.7	20.4	10.8	27.7	3.4
	20 to 49 employees.....	92	2.8	20.3	2.2	4.7	14.3	45.0	23.8	62.6	6.3
	50 to 99 employees.....	21	1.5	11.1	1.0	2.2	7.0	23.9	12.1	32.3	3.5
	100 to 249 employees.....	11	1.6	11.2	1.3	3.1	8.8	30.2	14.3	41.6	2.9
	250 to 499 employees.....	-	-	-	-	-	-	-	-	-	-
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	40	0.1	0.3	0.1	0.1	0.2	0.8	0.5	1.2	0.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payroll indicated had fewer than 5 employees. Actual payroll (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1411	Dimension stone industry.....1967..	22.1	20.0	1.6	0.1	0.4	28.2	20.0	8.2
	.....1963..	19.7	18.5	0.7	(Z)	0.5	25.6	18.5	7.1
	Dimension limestone subindustry.....1967..	6.5	5.3	1.0	(D)	(D)	9.3	5.3	4.0
	.....1963..	3.5	3.3	(Z)	-	0.2	6.3	3.3	3.0
	Dimension granite subindustry.....1967..	8.7	8.5	(D)	(D)	(D)	9.8	8.5	1.3
	.....1963..	9.4	8.8	0.4	-	0.2	9.8	8.8	1.0
	Dimension stone, n.e.c., subindustry..1967..	7.0	6.2	(D)	(D)	0.2	9.2	6.2	2.9
	.....1963..	6.8	6.5	0.2	(Z)	0.1	9.5	6.5	3.1
1422	Crushed and broken limestone industry...1967..	666.6	608.6	40.3	6.4	11.3	647.3	¹ 600.7	² 46.6
	.....1963..	542.9	510.4	18.7	6.0	7.8	648.8	¹ 503.3	² 145.5
1423	Crushed and broken granite industry.....1967..	114.2	106.0	7.3	(D)	(D)	110.3	¹ 105.7	² 4.6
	.....1963..	89.7	85.2	3.5	0.9	0.1	86.1	¹ 85.1	² 1.0
1429	Crushed and broken stone, n.e.c., industry.....1967..	182.7	165.6	12.4	2.5	2.1	188.4	¹ 162.7	² 25.7
	.....1963..	162.2	151.1	7.8	1.1	2.2	170.3	¹ 149.2	² 21.1

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand.

¹Represents net shipments (gross shipments less the cost of stone received for preparation).

²Includes the estimated value of crushed and broken stone produced and used in the same manufacturing establishment in the manufacture of cement, lime, and other manufactured products.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	Shipments including interplant transfers			
		1967		1963	
		Quantity (1,000 short tons)	Value (million dollars)	Quantity (1,000 short tons)	Value (million dollars)
	DIMENSION STONE				
	United States:				
	All dimension stone (net shipments), total ¹	2,761.7	90.9	3,484.0	91.6
	Rough dimension stone:				
	Net shipments ¹	1,915.0	25.6	2,227.0	22.1
	Gross shipments.....	1,971.2	28.2	2,356.0	25.6
	Dressed dimension stone.....	846.7	65.3	1,257.0	69.5
1412101	Limestone (net shipments), total ¹	1,230.7	19.5	1,531.0	19.9
	Rough dimension stone:				
	Net shipments ¹	989.7	9.2	1,075.0	5.9
	Gross shipments.....	996.8	9.3	1,095.0	6.3
	Dressed dimension stone.....	241.0	10.3	456.0	14.0
1413101	Granite (net shipments), total ¹	725.1	37.4	923.0	35.6
	Rough dimension stone:				
	Net shipments ¹	367.3	8.8	489.0	8.2
	Gross shipments.....	395.5	9.8	576.0	9.8
	Dressed dimension stone.....	357.8	28.5	434.0	27.4
1419101	Miscellaneous stone (slate, marble, sandstone, traprock, and miscellaneous stone), net shipments, total ¹	806.0	34.1	1,030.0	36.1
	Rough dimension stone:				
	Net shipments ¹	558.0	7.6	663.0	8.0
	Gross shipments.....	578.9	9.2	685.0	9.5
	Dressed dimension stone.....	248.0	26.5	367.0	28.1
	New England:				
	All dimension stone (net shipments), total ¹	310.9	19.8	390.0	20.6
	Rough dimension stone (net shipments) ¹	189.7	5.1	185.0	4.0
	Dressed dimension stone.....	121.1	14.7	205.0	16.6
1413101	Granite (net shipments), total ¹	257.0	12.3	276.0	11.8
	Rough dimension stone (net shipments) ¹	173.2	5.1	163.0	3.9
	Dressed dimension stone.....	83.8	7.2	113.0	8.0
1412101	Limestone and other stone (net shipments), total ¹	53.9	7.5	114.0	8.8
1419101	Rough dimension stone (net shipments) ¹	16.6	0.1	22.0	0.1
	Dressed dimension stone.....	37.3	7.5	92.0	8.7
	Vermont, all dimension stone (net shipments) ¹	163.0	11.2	219.0	12.2
	Massachusetts, all dimension stone (net shipments) ¹	82.7	5.1	120.0	4.5
	Middle Atlantic:				
	All dimension stone (net shipments), total ¹	283.6	8.1	319.0	7.2
	Rough dimension stone (net shipments) ¹	183.6	2.7	224.0	2.3
	Dressed dimension stone.....	100.1	5.4	95.0	4.9
	New York, all dimension stone (net shipments) ¹	47.7	2.0	70.0	1.3
	Pennsylvania:				
	All dimension stone (net shipments) ¹	² 235.9	² 26.1	249.0	5.9
	Rough dimension stone (net shipments) ¹	² 165.4	² 2.1	169.0	1.5
	Dressed dimension stone.....	70.5	3.9	80.0	4.3
	East North Central:				
	All dimension stone (net shipments) ¹	1,080.3	19.7	1,113.0	20.7
	Rough dimension stone (net shipments) ¹	885.8	9.5	669.0	6.0
	Dressed dimension stone.....	194.6	10.2	444.0	14.6
1412101	Limestone (net shipments) ¹	885.3	13.6	887.0	14.0
	Rough dimension stone (net shipments) ¹	732.9	7.1	531.0	4.0
	Dressed dimension stone.....	152.3	6.5	356.0	10.0
1413101	Granite and other stone (net shipments) ¹	195.0	6.1	226.0	6.7
1419101	Rough dimension stone (net shipments) ¹	152.8	2.4	138.0	2.0
	Dressed dimension stone.....	42.2	3.7	88.0	4.7
	Ohio, all dimension stone (net shipments) ¹	103.0	3.5	118.0	4.0
	Indiana:				
	All dimension stone (net shipments) ¹	705.1	11.0	793.0	12.2
	Rough dimension stone (net shipments) ¹	591.0	5.8	513.0	3.9
	Dressed dimension stone.....	114.1	5.2	280.0	8.3
	Wisconsin, all dimension stone (net shipments) ¹	161.7	3.6	162.0	3.8

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

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See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Net production (1,000 short tons)	Net shipments including interplant transfers		Net production (1,000 short tons)	Net shipments including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
14222 01	CRUSHED AND BROKEN LIMESTONE--Continued						
	South Atlantic.....	68,938.9	55,347.8	86.1	63,633.0	52,404.0	78.6
	Virginia.....	15,703.4	12,437.0	18.3	16,546.0	14,068.0	20.1
	West Virginia.....	9,681.4	5,917.3	10.5	5,253.0	5,040.0	8.9
	North Carolina.....	6,461.2	5,552.9	9.0	(NA)	(NA)	(NA)
	Georgia.....	2,994.3	2,618.1	5.5	2,656.0	2,078.0	5.1
	Florida.....	22,605.3	19,863.3	27.8	27,629.0	22,887.0	29.5
	East South Central.....	73,370.7	55,143.6	89.1	63,236.0	56,284.0	75.9
	Kentucky.....	26,016.2	24,971.9	36.7	24,089.0	24,254.0	34.6
	Tennessee.....	30,339.4	27,959.5	34.7	(NA)	(NA)	(NA)
	West South Central.....	43,444.6	29,620.2	36.3	37,554.0	26,797.0	29.7
	Arkansas.....	5,866.4	3,371.0	5.0	(NA)	(NA)	(NA)
	Louisiana.....	-	-	-	(NA)	(NA)	(NA)
	Oklahoma.....	11,308.2	9,009.5	10.7	10,591.0	8,807.0	9.2
	Texas.....	26,270.0	17,239.7	20.5	22,515.0	14,988.0	16.3
	Mountain.....	9,480.7	4,165.4	8.8	8,744.0	2,898.0	6.7
	Montana.....	1,081.7	418.9	0.7	(NA)	(NA)	(NA)
	Wyoming.....	833.3	611.0	1.3	(NA)	(NA)	(NA)
	Utah.....	1,674.2	948.0	2.3	(NA)	(NA)	(NA)
	Nevada.....	1,085.2	351.9	0.7	(NA)	(NA)	(NA)
	Pacific.....	21,186.2	8,885.5	16.8	20,448.0	7,128.0	11.6
	Washington.....	2,080.0	720.0	1.7	1,708.0	517.0	1.1
	Oregon.....	2,387.3	2,368.0	5.0	1,049.0	835.0	1.1
	California.....	15,580.6	5,238.2	8.9	17,022.0	5,615.0	9.0
	Hawaii.....	1,138.4	559.0	1.1	(NA)	(NA)	(NA)
14232 01	CRUSHED AND BROKEN GRANITE						
	United States.....	67,553.0	64,879.5	110.3	49,629.0	49,213.0	86.1
	Northeast.....	4,214.4	3,824.2	7.0	2,731.0	2,312.0	4.3
	Maine.....	114.8	62.4	0.1	(NA)	(NA)	(NA)
	Massachusetts.....	2,362.2	2,326.8	3.5	1,054.0	870.0	1.7
	Connecticut.....	460.3	435.3	1.0	(NA)	(NA)	(NA)
	East North Central.....	79.3	84.0	0.2	(NA)	(NA)	(NA)
	West North Central.....	1,129.2	1,118.9	1.7	(NA)	(NA)	(NA)
	South.....	53,392.1	51,170.6	89.6	(NA)	(NA)	(NA)
	North Carolina.....	17,108.0	16,297.5	25.1	(NA)	(NA)	(NA)
	South Carolina.....	5,912.6	5,685.1	8.6	7,186.0	7,058.0	10.0
	Georgia.....	17,252.3	17,266.4	26.3	13,510.0	13,829.0	19.9
	West.....	8,737.9	8,681.8	11.8	6,027.0	5,994.0	11.6
	California.....	8,619.2	8,548.4	11.6	5,245.0	5,237.0	10.4
14292 01	CRUSHED AND BROKEN STONE, NOT ELSEWHERE CLASSIFIED						
	United States.....	89,939.0	86,718.3	188.4	82,689.0	78,894.0	167.9
	New England.....	9,007.3	8,133.7	14.7	8,388.0	7,565.0	14.0
	New Hampshire.....	644.4	586.4	1.1	(NA)	(NA)	(NA)
	Connecticut.....	4,571.9	4,152.1	7.0	4,363.0	3,920.0	6.8
	Middle Atlantic.....	28,619.4	27,959.7	63.3	24,342.0	22,892.0	54.0
	New York.....	11,335.6	10,646.8	22.4	(NA)	(NA)	(NA)
	Pennsylvania.....	7,049.6	7,271.3	18.7	(NA)	(NA)	(NA)
	East North Central.....	4,842.9	4,795.9	11.4	(NA)	(NA)	(NA)
	Ohio.....	961.9	972.2	2.4	(NA)	(NA)	(NA)
	Illinois.....	1,135.8	1,165.9	1.7	(NA)	(NA)	(NA)
	Michigan.....	1,152.1	1,075.6	2.2	(NA)	(NA)	(NA)
	West North Central.....	5,292.9	5,100.5	8.6	(NA)	(NA)	(NA)
	Minnesota.....	640.6	571.1	1.1	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963--Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Net production (1,000 short tons)	Net shipments including interplant transfers		Net production (1,000 short tons)	Net shipments including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
14292 01	CRUSHED AND BROKEN STONE, NOT ELSEWHERE CLASSIFIED--Continued						
	South.....	20,413.9	20,041.0	51.4	(NA)	(NA)	(NA)
	Maryland.....	4,065.6	4,079.6	8.5	(NA)	(NA)	(NA)
	Virginia.....	3,766.4	3,794.6	8.9	3,726.0	362.2	9.1
	West Virginia.....	467.1	452.4	1.2	(NA)	(NA)	(NA)
	North Carolina.....	3,831.0	3,732.7	7.2	2,903.0	2,980.0	6.0
	Georgia.....	1,596.7	1,538.3	10.3	2,247.0	2,189.0	9.0
	Arkansas.....	3,937.6	3,807.6	4.6	(NA)	(NA)	(NA)
	Texas.....	1,503.6	1,434.5	4.7	(NA)	(NA)	(NA)
	West.....	21,976.5	20,687.5	38.9	24,206.0	22,974.0	36.5
	Colorado.....	209.9	114.5	0.6	(NA)	(NA)	(NA)
	Arizona.....	225.7	223.6	1.0	(NA)	(NA)	(NA)
	Washington.....	2,267.1	2,288.8	4.4	(NA)	(NA)	(NA)
	Oregon.....	4,668.4	4,621.4	9.4	(NA)	(NA)	(NA)
	California.....	11,520.5	10,922.5	18.0	11,762.0	11,691.0	16.7
	Hawaii.....	1,799.9	1,449.9	3.5	(NA)	(NA)	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (NA) Not available. (X) Not applicable. (D) Withheld to avoid disclosing figures for individual companies.

¹Represents gross shipments, including interplant transfers, less rough stone received from other establishments for dressing at dressing plants operated in conjunction with a quarry.

²Figures for New Jersey are included with those for Pennsylvania.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1411.-- DIMENSION STONE				
	<u>Geographic area</u>						
	UNITED STATES						
	Selected supplies, purchased machinery installed, and fuels used, total.....		(X)	3.9	(X)	¹ 4.9	
	Selected supplies and purchased machinery installed, total.....		(X)	3.4	(X)	¹ 4.3	
353011	Purchased machinery installed.....		(X)	0.7	(X)	0.8	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	}	(X)	0.1	}	¹ 3.5	
289212	Ammonium nitrate.....		(X)	0.1			
289214	Blasting accessories.....		(X)	(Z)			
331201	Steel mill shapes and forms.....	}	(X)	2.5	}		
300167	Rubber and plastic products, including tires and tubes.....		(X)				
970099	All other supplies.....		(X)				
974000	Undistributed supplies ²						
	Fuels used, total.....		(X)	0.5	(X)	0.6	
121005	Coal.....	1,000 short tons	(NA)	(Z)	1.0	}	
291141	Fuel oil.....	1,000 barrels...	28.7	0.1	42.0		
291151							
131300	Gas.....	Million cu. ft..	}	(X)	250.0		
291111	Gasoline.....	1,000 gallons...			0.4		749.0
960018	Other fuels.....					(X)	
977000	Undistributed fuels ²				(X)		
			INDUSTRY 1422.-- CRUSHED AND BROKEN LIMESTONE				
	<u>Geographic area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	202.7	(X)	¹ 163.6	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	181.7	(X)	¹ 144.7	
	Minerals received for preparation:						
141101	Rough blocks used to produce dressed stone.....	1,000 short tons	(Z)	(Z)	}	7.1	
142101	Broken stone received for crushing, screening, or washing....	..do.....	6,318.0	8.0			(NA)
144191	Sand and gravel.....	..do.....	846.8	1.2			(NA)
353011	Purchased machinery installed.....		(X)	60.9	(X)	40.6	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	76,618.1	15.1	}	¹ 97.0	
289212	Ammonium nitrate.....	..do.....	73,390.1	3.4			
289214	Blasting accessories.....		(X)	1.9			
331201	Steel mill shapes and forms.....		(NA)	7.4			
300167	Rubber and plastic products, including tires and tubes.....		(X)	6.4			
970099	All other supplies.....	}	(X)	77.5			
974000	Undistributed supplies ²						
	Fuels used, total.....			(X)	21.0	(X)	19.0
121005	Coal.....	1,000 short tons	51.3	0.4	26.0	}	
	Fuel oil:						
291141	Distillate.....	1,000 barrels...	1,597.7	8.0	1,284.0		
291151	Residual.....	..do.....	145.8	0.6	308.0		
131300	Gas.....	Million cu. ft..	3,853.5	1.6	1,514.0	}	
291111	Gasoline.....	1,000 gallons...	20,545.0	5.2	24,587.0		
960018	Other fuels.....		(X)	0.6	(X)		
977000	Undistributed fuels ²		(X)	4.6	(X)		

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	MIDDLE ATLANTIC DIVISION		INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Con.			
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	30.8	(X)	¹ 26.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	27.6	(X)	¹ 23.7
142101	Minerals received for preparation: Broken stone received for crushing, screening, or washing....	1,000 short tons	931.0	1.5	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	8.4	(X)	6.1
289211	Supplies used: Explosive materials, except ammonium nitrate.....	1,000 pounds.....	15,142.8	3.0	}	(NA)
331201	Steel mill shapes and forms.....		(NA)	1.0		
300167	Rubber and plastic products, including tires and tubes.....		(X)	0.8		
	Fuels used, total.....		(X)	3.2	(X)	2.4
2911412	} Fuel oil.....	1,000 barrels...	247.2	1.2	201.0	}
2911515						
291111	Gasoline.....	1,000 gallons...	(NA)	0.5	3,109.0	(NA)
	PENNSYLVANIA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	22.3	(X)	¹ 14.7
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	19.8	(X)	¹ 13.2
353011	Purchased machinery installed.....		(X)	5.9	(X)	4.0
	Fuels used, total.....		(X)	2.4	(X)	1.5
	EAST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	56.0	(X)	¹ 45.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	50.8	(X)	¹ 40.2
142101	Minerals received for preparation: Broken stone received for crushing, screening or washing....	1,000 short tons	2,139.7	2.7	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	17.9	(X)	12.2
289211	Supplies used: Explosive materials, except ammonium nitrate.....	1,000 pounds....	21,706.9	4.0	}	(NA)
289212	Ammonium nitrate.....	do.....	26,996.4	1.3		
289214	Blasting accessories.....		(X)	0.5		
331201	Steel mill shapes and forms.....		(NA)	2.5		
300167	Rubber and plastic products, except tires and tubes.....		(X)	2.0		
	Fuels used, total.....		(X)	5.2	(X)	5.2
291141	} Fuel oil.....	1,000 barrels...	409.3	2.0	427.0	}
291151						
291111	Gasoline.....	1,000 gallons...	(NA)	1.3	6,863.0	(NA)
	OHIO					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	16.1	(X)	¹ 14.5
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	14.7	(X)	¹ 13.0
353011	Purchased machinery installed.....		(X)	5.0	(X)	3.2
	Fuels used, total.....		(X)	1.5	(X)	1.5

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Con.			
	INDIANA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	10.2	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	9.3	(X)	(NA)
353011	Purchased machinery installed.....		(X)	4.2	(X)	(NA)
	Fuels used, total.....		(X)	0.9	(X)	(NA)
	ILLINOIS					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	16.9	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	15.4	(X)	(NA)
353011	Purchased machinery installed.....		(X)	4.2	(X)	(NA)
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	7,339.7	1.4	(X)	(NA)
289212	Ammonium nitrate.....	do.....	10,955.5	0.5		
	Fuels used, total.....		(X)	1.5	(X)	(NA)
	WEST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	34.3	(X)	¹ 32.5
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	29.5	(X)	¹ 27.9
353011	Purchased machinery installed.....		(X)	10.4	(X)	8.5
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	15,587.5	3.1	(NA)	(NA)
289212	Ammonium nitrate.....	do.....	8,947.7	0.5		
331201	Steel mill shapes and forms.....		(NA)	1.9		
300167	Rubber and plastic products, except tires and tubes.....		(X)	1.3		
	Fuels used, total.....		(X)	4.8	(X)	4.5
291141	Fuel oil.....	1,000 barrels....	407.9	2.1	359.0	(NA)
291151						
291111	Gasoline.....	1,000 gallons....	(NA)	1.6	6,287.0	
	MISSOURI					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	14.1	(X)	¹ 13.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	12.3	(X)	¹ 11.5
353011	Purchased machinery installed.....		(X)	4.5	(X)	4.8
	Supplies used:					
331201	Steel mill shapes and forms.....		(NA)	1.2	(NA)	(NA)
	Fuels used, total.....		(X)	1.8	(X)	1.7
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	31.7	(X)	¹ 21.8
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	28.9	(X)	¹ 19.4
	Minerals received for preparation:					
142101	Broken stone received for crushing, screening, or washing....	1,000 short tons	1,965.4	2.2	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	8.5	(X)	5.0

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Continued			
	SOUTH ATLANTIC DIVISION--Continued					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used--Continued					
	Selected supplies, minerals received for preparation, and purchased machinery installed--Continued					
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	12,492.9	2.5	} (NA)	(NA)
331201	Steel mill shapes and forms.....	.....	(NA)	1.1		
300167	Rubber and plastic products, except tires and tubes.....	.....	(X)	0.9		
	Fuels used, total.....	.....	(X)	2.8	(X)	2.5
291141	Fuel oil.....	1,000 barrels..	270.5	1.3	274.0	(NA)
291151						
291111	Gasoline.....	1,000 gallons..	(NA)	0.7	3,352.0	
	EAST SOUTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	29.7	(X)	¹ 23.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	27.1	(X)	¹ 21.0
353011	Purchased machinery installed.....	.....	(X)	8.5	(X)	6.1
	Supplies used:					
300167	Rubber and plastic products, except tires and tubes.....	.....	(X)	0.9	(NA)	(NA)
	Fuels used, total.....	.....	(X)	2.6	(X)	2.6
291141	Fuel oil.....	1,000 barrels..	210.1	1.0	185.0	(NA)
291151						
	WEST SOUTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	12.8	(X)	¹ 11.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	11.4	(X)	¹ 10.1
353011	Purchased machinery installed.....	.....	(X)	5.5	(X)	2.5
	Fuels used, total.....	.....	(X)	1.4	(X)	1.1
	Type Of Operation					
	Open quarries' with crushing plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	178.6	(X)	¹ 135.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	159.9	(X)	¹ 119.0
142101	Minerals received for preparation:					
	Broken stone received for crushing, screening, or washing..	1,000 short tons	2,279.3	3.0	(NA)	(NA)
353011	Purchased machinery installed.....	.....	(X)	55.2	(X)	35.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	69,851.8	13.7	} (X)	(NA)
289212	Ammonium nitrate.....	do.....	63,412.8	2.9		
289214	Blasting accessories.....	.....	(X)	1.6		
331201	Steel mill shapes and forms.....	.....	(NA)	6.7		
300167	Rubber and plastic products, including tires and tubes.....	.....	(X)	5.7		
	Fuels used, total.....	.....	(X)	18.7	(X)	16.9
	Fuel oil:					
291141	Distillate.....	1,000 barrels..	1,438.5	7.1	1,177.0	} (NA)
291151	Residual.....	do.....	132.3	0.5	198.0	
131300	Gas.....	million cu. ft.	3,271.6	1.4	1,196.0	
291111	Gasoline.....	1,000 gallons..	(NA)	4.6	21,152.0	

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1422.--CRUSHED AND BROKEN LIMESTONE--Continued			
	SOUTH ATLANTIC DIVISION					
	Type of Operation--Continued					
	Combination open and underground quarries with crushing plants:					
	Selected supplies, minerals received for preparation, and fuels used, total.....		(X)	5.1	(X)	¹ 3.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	4.5	(X)	¹ 2.8
353011	Purchased machinery installed.....		(X)	1.7	(X)	0.7
	Fuels used, total.....		(X)	0.6	(X)	0.3
	Underground quarries with crushing plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	8.7	(X)	¹ 7.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	7.9	(X)	¹ 6.3
353011	Purchased machinery installed.....		(X)	2.6	(X)	1.6
289211	Supplies used:					
289212	Explosive materials, except ammonium nitrate.....	1,000 pounds...	8,639.9	0.8	(NA)	(NA)
	Ammonium nitrate.....	do.....				
	Fuels used, total.....		(X)	0.8	(X)	0.7
	Separately operated preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	6.5	(X)	¹ 11.0
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	6.1	(X)	¹ 10.6
142101	Minerals received for preparation:					
	Broken stone received for crushing, screening, or washing.	1,000 short tons.....	3,724.2	4.4	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.5	(X)	1.3
	Fuels used, total.....		(X)	0.4	(X)	0.4
	Geographic Area		INDUSTRY 1423:--CRUSHED AND BROKEN GRANITE			
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	41.7	(X)	¹ 31.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	39.5	(X)	¹ 29.3
142101	Minerals received for preparation:					
	Broken stone received for crushing, screening, or washing...	1,000 short tons.....	253.0	0.2	(NA)	0.1
	Sand and gravel.....	do.....	287.8	0.5	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	12.6	(X)	6.5
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	12,271.2	2.4	(X)	¹ 22.7
289212	Ammonium nitrate.....	do.....	14,702.6	0.6		
289214	Blasting accessories.....		(X)	0.3		
331201	Steel mill shapes and forms.....		(NA)	2.1		
300167	Rubber and plastic products, including tires and tubes.....		(X)	1.4		
970099	All other supplies.....		(X)	19.4		
974000	Undistributed supplies ²					
	Fuels used, total.....		(X)	2.2	(X)	1.9
121005	Coal.....	1,000 short tons.....	(D)	(3)	6.0	
291141	Fuel oil.....	1,000 barrels..	261.0	1.3	187.0	1.9
291151		million cu. ft.	84.1	(3)	630.0	
131300		1,000 gallons..	1,739.0	0.5	2,171.0	
291111			(X)	³ 0.5	(X)	
960018	Other fuels.....					
977000	Undistributed fuels ²					

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1423.--CRUSHED AND BROKEN GRANITE--Continued			
	Geographic Area--Continued					
	SOUTH REGION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	37.3	(X)	25.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	35.6	(X)	24.4
353011	Purchased machinery installed.....		(X)	11.0	(X)	5.3
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	11,632.9	2.3	}	(X)
289212	Ammonium nitrate.....	do.....	11,042.1	0.4		
289214	Blasting accessories.....		(X)	0.2		
331201	Steel mill shapes and forms.....		(NA)	1.8		
300167	Rubber and plastic products, including tires and tubes....		(X)	1.1		
	Fuels used, total.....		(X)	1.7	(X)	1.5
	VIRGINIA					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	4.1	(X)	13.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	3.9	(X)	13.0
353011	Purchased machinery installed.....		(X)	1.8	(X)	0.5
	Fuels used, total.....		(X)	0.2	(X)	0.2
	NORTH CAROLINA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	9.5	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	9.0	(X)	(NA)
	Supplies used:					
300167	Rubber and plastic products, including tires and tubes....		(X)	0.3	(X)	(NA)
	Fuels used, total.....		(X)	0.5	(X)	(NA)
	GEORGIA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	10.3	(X)	19.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	9.7	(X)	19.0
353011	Purchased machinery installed.....		(X)	3.8	(X)	2.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	5,449.8	1.1	}	(X)
289212	Ammonium nitrate.....	do.....	3,878.4	0.2		
300167	Rubber and plastic products, including tires and tubes....		(X)	0.4		
	Fuels used, total.....		(X)	0.5	(X)	0.4
	Type Of Operation					
	Producing open quarries with crushing plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	40.9	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	38.8	(X)	(NA)
353011	Purchased machinery installed.....		(X)	11.7	(X)	(NA)
	Supplies used:					
28921-	Explosive materials.....		(X)	2.9	(X)	(NA)
331201	Steel mill shapes and forms.....		(X)	1.9	(X)	(NA)
	Fuels used, total.....		(X)	2.1	(X)	(NA)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1429.--CRUSHED AND BROKEN STONE, N.E.C			
	<u>Geographic area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	53.9	(X)	¹ 57.7
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	47.9	(X)	¹ 52.4
	Minerals received for preparation:					
142101	Broken stone received for crushing, screening, or washing...	1,000 short tons	3,206.8	2.9	(NA)	(NA)
144191	Sand and gravel.....	...do.....	1,049.4	0.3	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	13.4	(X)	12.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	8,055.8	1.6	}	(X)
289212	Ammonium nitrate.....	...do.....	8,904.0	0.4		
289214	Blasting accessories.....	.....	(X)	0.3		
331201	Steel mill shapes and forms.....	.....	(NA)	2.9		
300167	Rubber and plastic products, including tires and tubes.....	.....	(X)	1.2		
970099	All other supplies.....		(X)	24.8		¹ 37.6
974000	Undistributed supplies ²					
	Fuels used, total.....		(X)	6.1	(X)	5.3
121005	Coal.....	1,000 short tons	148.9	1.2	109.0	}
	Fuel oil:					
291141	Distillate.....	1,000 barrels...	252.3	1.2	238.0	
291151	Residual.....	...do.....	52.2	0.2	178.0	
131300	Gas.....	Million cu. ft..	1,364.1	0.7	1,258.0	}
291111	Gasoline.....	1,000 gallons...	4,030.0	1.0	4,059.0	
960018	Other fuels.....	.....	(X)	0.1	(X)	
977000	Undistributed fuels ².....	.....	(X)	1.6	(X)	
	MIDDLE ATLANTIC					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	17.7	(X)	¹ 18.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	16.0	(X)	¹ 17.4
	Minerals received for preparation:					
142101	Broken stone received for crushing, screening, or washing...	1,000 short tons	1,108.6	1.7	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	3.8	(X)	3.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	4,996.2	0.7	}	(NA)
289212	Ammonium nitrate.....	...do.....				
331201	Steel mill shapes and forms.....	.....	(NA)	0.9		
300167	Rubber and plastic products, including tires and tubes.....	.....	(X)	0.4		
	Fuels used, total.....		(X)	1.6	(X)	1.5
291141	Fuel oil.....	1,000 barrels...	104.9	0.5	117.0	(NA)
291151						
	NEW JERSEY					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	6.8	(X)	10.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	6.3	(X)	10.2
353011	Purchased machinery installed.....		(X)	1.2	(X)	2.2
	Fuels used, total.....		(X)	0.4	(X)	0.5

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1429. --CRUSHED AND BROKEN STONE, N. E. C. --Con.			
	<u>Geographic areas--Continued</u>					
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	11.8	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	9.9	(X)	(NA)
353011	Purchased machinery installed.....		(X)	3.1	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....		(X)	1.2	(X)	(NA)
	Fuels used, total.....		(X)	1.9	(X)	(NA)
	VIRGINIA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.3	(X)	¹ 2.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.4	(X)	¹ 1.5
353011	Purchased machinery installed.....		(X)	0.8	(X)	0.5
	Fuels used, total.....		(X)	0.9	(X)	0.8
	NORTH CAROLINA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.5	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.9	(X)	(NA)
353011	Purchased machinery installed.....		(X)	1.0	(X)	(NA)
	Fuels used, total.....		(X)	0.6	(X)	(NA)
	WEST REGION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	11.2	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	10.2	(X)	(NA)
353011	Purchased machinery installed.....		(X)	3.8	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....		(NA)	0.6	(NA)	(NA)
	Fuels used, total.....		(X)	1.0	(X)	(NA)
	<u>Type Of Operation</u>					
	Open quarries with crushing plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	49.4	(X)	¹ 49.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	43.6	(X)	¹ 45.0
353011	Purchased machinery installed.....		(X)	12.0	(X)	11.4
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....		}	2.3	(X)	(NA)
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
300167	Rubber and plastic products, including tires and tubes....		(X)	1.1		
	Fuels used, total.....		(X)	5.7	(X)	4.6
291141	Fuel oil.....	1,000 barrels...	278.0	1.3	302.0	}
291151	Gas.....	Million cu. ft..	1,364.1	0.7	979.0	
131300	Gasoline.....	1,000 gallons...	3,780.0	0.9	3,692.0	
291111						

Note: Detailed figures may not add to totals due to rounding.

Standard notes: (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹Includes purchases for resales.

²This item represents the total cost of supplies or fuels used for establishments that did not report detailed data. For 1967, this also includes estimates for establishments that were not mailed report forms.

³The costs of coal and gas are included with the costs of other fuels and undistributed fuels.



Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



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INDUSTRY SERIES

SAND AND GRAVEL

SIC code	Industry
1442	Construction sand and gravel
1446	Industrial sand

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Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	3
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	5
2B General Statistics for Manufacturing Establishments With Mining Operations, by Geographic Area: 1967 and 1963	7
3A Detailed Statistics, by Geographic Area: 1967	8
3B Detailed Statistics, by Selected Types of Operations: 1967	12
4 General Statistics, by Employment Size of Establishment: 1967	15
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	16
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	17
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	25
APPENDIX Explanation of Terms	A1

Introduction

GENERAL—This report from the 1967 Census of Manufactures is one of a series of 80 industry reports each of which provides statistics for groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, capital expenditures, inventories, etc.

These separate reports will subsequently be issued as portions of the final census volumes. The content of the three volumes follows: *Volume I, Summary Statistics*, will show comparative statistics for industries, States, and standard metropolitan statistical areas on the more important measures of the activity of manufacturing establishments—employment, payrolls, inventories, capital expenditures, value added by manufacture, important materials consumed, etc.; *Volume II, Industry Statistics*, will be a consolidation of reports for the 80 groups of industries and will show the same information as that shown in this report; *Volume III, Area Statistics*, will contain general statistics (number of establishments, employment, payrolls, value added by manufacture, and capital expenditures) for each State and its important standard metropolitan statistical areas and counties, by industry groups and important individual industries. Totals for "all manufacturing" will be shown for counties and cities with more than 450 manufacturing employees.

The "Introduction" to the final volumes of the Census of Manufactures will treat at greater length many of the subjects described in this introduction. For example, the volume text will discuss the relationship of value added by manufacture to national income by industrial origin; the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

The 1967 census is the 28th census of manufactures of the United States. The first census of manufactures covered 1809, and (with the exception of 1829) a census was taken at 10-year intervals in connection with the decennial census of population up to and including 1899. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939. The census was suspended during World War II, but it was resumed for 1947. Present legislation (Title 13, United States Code) provides for a census of manufactures every 5 years, with annual sample surveys authorized for interim years. Such "Annual Surveys of Manufactures" were taken during the years 1949 through 1953, 1955 through 1957, 1959 through 1962, 1964 through 1966, and for the year 1968. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next census will be taken in 1973 covering manufacturing activity during 1972.

The 1967 Census of Manufactures was conducted jointly with the censuses of business (wholesale, retail, and services) and mineral industries, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF CENSUS OF MANUFACTURES: DEFINITION OF MANUFACTURING INDUSTRIES—The 1967 Census of Manufactures covers all establishments primarily engaged in manufacturing as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957 the system was extensively revised and historical comparability of some data seriously affected. This revision and its effects on census series are discussed at length in the introduction and appendixes to the 1958 census volumes.

The *Standard Industrial Classification Manual* defines manufacturing as the mechanical or chemical transformation of inorganic or organic substances into new products. The assembly of component parts of products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salesmen. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for the trade; but they are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

ESTABLISHMENT BASIS OF REPORTING—The census of manufactures is conducted on an establishment basis. That is, a company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports, therefore, differ substantially from those prepared on a company basis; i.e., from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the nonmanufacturing activities of companies primarily engaged in manufacturing.

In 1967, as in earlier years, a minimum size limit was set for including establishments in the census. Reports were required from all establishments employing one or more persons at any time during the census year. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

THE CENSUS REPORT FORMS—The 1967 Census of Manufactures, similar to all those since 1947, was primarily a mail canvass. The diversity of manufacturing activities made it

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

SAND AND GRAVEL

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 144, Sand and Gravel. The separate industries for which statistics are published in this report are as follows:

SIC Code and Title

1422 - Construction Sand and Gravel

1446 - Industrial Sand

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTION

Industry 1422. Construction Sand and Gravel. This industry represents establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, or otherwise preparing sand and gravel for construction uses.

Industry 1446. Industrial Sand. This industry represents establishments primarily engaged in operating sand pits and dredges, and in washing, screening, and otherwise preparing sand for uses other than construction, such as glassmaking, molding, and abrasives.

Establishments included in the 1967 minerals census, as in previous minerals censuses, represent only establishments primarily engaged in producing sand and gravel. Establishments engaged in producing sand and gravel as a secondary activity in conjunction with the production of concrete brick and block, ready-mixed concrete, asphalt and tar paving mixtures, or other manufactured products are classified in the census of manufactures, and data for them are included only in tables 1 and 2B of this report. Production of sand and gravel by such operations amounted to about 40 million tons valued at about \$64 million as compared with net shipments of 570 million tons valued at \$680 million from all establishments reported which were classified in the Sand and Gravel Industries, and 10 million tons produced as secondary products in other mineral industries.

SUMMARY OF FINDINGS

The combined total value of shipments of the sand and gravel industries was \$779 million of which primary products of this industry amounted to \$648 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to \$67 million. The principal secondary products were ready-mixed concrete, \$12 million; asphalt paving mixtures, \$5 million; and crushed and broken stone, \$13 million. Of the total value of shipments, the Construction Sand and Gravel Industry accounted for \$625 million. The remainder was accounted for by the Industrial Sand Industry, with receipts of \$90 million.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work

for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 with product statistics (table 6) showing shipments for all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the sand and gravel industries are not entirely comparable to statistics for the same commodities published by the Bureau of Mines. This is due primarily to the exclusion in Census statistics of sand and gravel production by Federal, State, and local governments. The most nearly comparable statistics from the two bureaus are shown in the table below. As indicated in this table, the Bureau of Mines shows separately figures for "commercial operations" and "government-and-contractor operations." Census figures include all of the first of these groups of establishments and some establishments in the second group, insofar as the latter represents contractors or subcontractors on Federal, State, or local government projects which were able to provide separate complete reports for their sand and gravel mining.

Other reasons for differences in the product statistics are:

- (1) The Bureau of the Census collects information on production and shipments and calculates net shipments, whereas the Bureau of Mines obtains figures on products sold or used.
- (2) The Bureau of the Census excludes single unit establishments without paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which Census excludes is usually small.
- (3) Differences exist in coverage in certain areas for both collecting agencies.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics	
	Production (million short tons)	Shipments including interplant transfers		Sold or used by producers	
		Quantity (million short tons)	Value (million dollars)	Quantity (million short tons)	Value (million dollars)
Construction sand, total.....	(NA)	(NA)	(NA)	333.9	324.0
Excluding Federal, State, and local government operations.	389.6	371.9	386.4	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	279.8	280.7
Government and contractor.....	(NA)	(NA)	(NA)	54.0	43.3
Glass sand.....	9.5	9.5	34.0	9.3	30.3
Molding sand.....	8.5	8.4	27.8	9.5	26.9
Industrial sand, n.e.c.....	6.8	6.6	29.0	6.6	28.6
Gravel, total.....	(NA)	(NA)	(NA)	547.8	571.9
Excluding Federal, State, and local government operations.	228.6	224.8	271.9	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	362.4	411.8
Government and contractor.....	(NA)	(NA)	(NA)	185.4	160.1

(NA) Not available.

n.e.c. Not elsewhere classified.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Industry or subindustry, and year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value of shipments and receipts	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts ¹	Value of net shipments and receipts	Quantity of sand and gravel	Capital expendi- tures
		Total	With 20 employ- ees or more	Number	Payroll	Number	Man- hours	Wages							
GROUP 144.--SAND AND GRAVEL, AND SAND AND GRAVEL MINING IN MANUFACTURING															
1967, total ²	(NA)	3,565	512	37.1	243.1	30.5	64.7	187.6	602.3	208.8	(NA)	778.8	767.9	620.0	(NA)
Sand and gravel industries.....	(NA)	3,232	485	34.6	229.2	28.0	59.9	173.7	547.6	199.7	62.0	715.0	704.1	579.9	94.3
Mining in manufacturing establishments.....	(NA)	333	27	³ 2.5	³ 13.9	³ 2.5	4.8	13.9	54.7	9.1	(NA)	⁴ 63.8	⁴ 63.8	40.1	(NA)
1963, total.....	4,729	5,241	534	43.0	225.0	35.9	76.4	183.1	582.7	192.8	(NA)	757.7	746.2	614.7	(NA)
Sand and gravel industry	4,141	4,616	512	40.1	212.2	33.0	70.6	170.3	513.7	182.1	58.0	678.1	666.6	557.5	75.7
Mining in manufacturing establishments.....	618	625	22	³ 2.9	³ 12.8	³ 2.9	5.8	12.8	69.0	10.7	(NA)	⁴ 79.7	⁴ 79.7	57.2	(NA)
1958, total.....	⁵ 3,732	4,095	511	39.7	183.9	33.3	71.8	145.9	499.2	152.1	(NA)	633.2	624.6	543.7	(NA)
Sand and gravel industry	⁵ 3,355	3,708	484	37.2	172.8	30.7	66.7	134.8	435.4	144.8	38.5	562.1	553.5	481.9	56.6
Mining in manufacturing establishments ⁶	377	387	27	³ 2.6	³ 11.1	³ 2.6	5.1	11.1	63.8	7.3	(NA)	⁴ 71.1	⁴ 71.1	61.7	(NA)
1954, total.....	(NA)	(NA)	(NA)	40.3	162.3	34.4	77.8	134.0	(NA)	(NA)	(NA)	490.0	479.4	416.6	(NA)
Sand and gravel industry	3,348	3,939	455	36.5	147.6	30.6	70.2	119.3	357.6	⁷ 107.9	47.9	467.2	⁸ 456.6	395.7	46.1
Mining in manufacturing establishments ⁹	(NA)	(NA)	(NA)	³ 3.8	³ 14.7	³ 3.8	7.6	14.7	(NA)	(NA)	(NA)	⁴ 22.8	⁴ 22.8	20.8	(NA)
1939 ¹⁰ ¹¹	1,253	1,569	(NA)	19.8	25.2	17.0	35.8	18.8	61.9	⁷ 17.5	(NA)	(NA)	79.4	122.5	(NA)
1929 ¹¹	(NA)	1,072	(NA)	22.0	37.0	18.1	(NA)	25.4	89.2	23.2	8.0	(NA)	112.4	175.3	(NA)
INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL															
1967 ²	(NA)	3,069	422	30.5	202.0	24.8	53.1	154.6	481.7	174.5	53.9	625.4	615.7	556.6	84.7
1963 ¹²	4,001	4,419	462	36.4	190.9	30.0	64.0	154.5	459.3	164.4	52.8	607.5	597.1	534.9	69.0
INDUSTRY 1446.--INDUSTRIAL SAND															
1967 ²	(NA)	163	63	4.1	27.2	3.2	6.8	19.1	65.9	25.2	8.1	89.6	88.4	23.3	9.6
1963 ¹²	159	197	50	3.7	21.2	3.0	6.6	15.8	54.4	17.7	5.2	70.5	69.5	14.6	6.8
Glass sand subindustry:															
1967 ²	(NA)	41	27	1.7	11.3	1.3	2.9	7.9	27.1	9.5	3.6	36.4	36.4	6.7	3.9
1963.....	32	39	23	1.6	9.1	1.2	2.7	6.7	22.6	7.5	3.0	29.1	28.8	5.5	4.0
1958.....	39	45	19	1.6	7.5	1.3	2.8	5.7	20.7	8.0	2.4	28.3	(D)	6.3	2.7
1954.....	40	44	20	1.3	5.1	1.1	2.5	4.3	13.7	5.0	1.0	18.6	(NA)	5.5	1.1
1939.....	32	40	(NA)	1.5	2.1	1.3	2.7	1.5	4.6	1.5	(NA)	(NA)	6.1	3.2	(NA)
1929.....	(NA)	25	(NA)	1.1	1.6	1.0	(NA)	1.3	4.1	1.3	0.4	(NA)	5.4	2.2	(NA)
Molding sand subindustry:															
1967 ²	(NA)	71	18	1.1	7.6	0.9	1.9	5.5	17.4	8.7	2.9	25.5	24.8	6.4	3.5
1963.....	68	93	11	0.9	5.0	0.8	1.5	3.8	12.8	4.0	0.8	16.6	16.3	5.4	0.9
1958.....	98	124	16	1.3	5.4	1.0	1.9	3.9	12.1	4.4	0.9	16.4	(D)	6.0	1.0
1954.....	105	131	8	1.1	3.7	1.0	2.0	3.1	9.0	2.7	0.9	11.8	(NA)	6.0	0.8
1939.....	97	146	(NA)	1.2	1.2	1.1	1.8	0.9	3.4	0.7	(NA)	(NA)	4.1	3.8	(NA)
1929.....	(NA)	90	(NA)	1.2	1.9	1.0	(NA)	1.3	4.0	0.8	0.4	(NA)	4.8	4.2	(NA)
Industrial sand, n.e.c., subindustry:															
1967 ²	(NA)	51	18	1.3	8.2	1.0	2.1	5.8	21.4	7.0	1.6	27.8	27.3	4.6	2.2
1963 ¹²	59	65	16	1.3	7.1	1.0	2.3	5.4	19.0	6.3	1.4	24.8	24.4	3.7	1.9

Note: Detailed figures may not add to totals because of independent rounding.

Footnotes continued on next page.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(Footnotes for table 1--14B--Continued)

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry or subindustry. For 1963 and 1958, for the mineral industries, represents net shipments (gross shipments less sand and gravel received for preparation). For sand and gravel mining in manufactures, represents gross shipments plus production of sand and gravel for use in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures. For 1954, for the mineral industries, represents gross shipments. For 1939 and 1929, represents production.

²In 1967, for the first time, data for establishments without paid employees were excluded from the census. In 1963, in industry 1442, there were approximately 615 establishments without paid employees, and in industry 1446, there were approximately 15 establishments without paid employees. In industries 1442 and 1446, they accounted for less than 1 percent of these industries value added.

³The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

⁴Includes the estimated value of sand and gravel produced and used in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures.

⁵Represents the sum of figures shown for the separate subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.

⁶Except for number of operating companies, number of establishments, and quantity of sand and gravel, excludes data for 2 establishments in Hawaii.

⁷Excludes the cost of sand and gravel received for preparation.

⁸Represents the value of shipments and receipts less the value of shipments of products purchased for resale without further processing. Not adjusted to exclude the value of sand and gravel transferred to other establishments for preparation, for this separate data are not available.

⁹Excludes data for 2 pits in Alaska.

¹⁰Excludes data for 2 nonproducing operations.

¹¹Excludes data for Alaska and Hawaii. For 1939, excludes construction sand and gravel establishments that produced less than 15,000 tons unless reported principal expenses or cost of buildings, machinery, and equipment acquired during the year at such an establishment amounted to \$15,000 or more. For 1929, excludes all construction sand and gravel establishments that produced less than 25,000 tons. For 1954, about 3 percent of the total construction sand and gravel produced was from establishments with output of less than 15,000 tons. For 1939 and 1929, excludes all establishments engaged only in producing unprepared sand and gravel; unprepared sand and gravel amounted to only about 4 percent of the tabulated production in the 1939 census, as compared with 11 percent of tabulated production for 1954. For 1939 and 1929, excludes operations of companies producing sand and gravel exclusively for their own use, such as construction companies and railroads; if separate records for these mining activities were available they included for later years.

¹²For years prior to 1963, figures for the Construction Sand and Gravel Industry and the Industrial Sand, N.E.C., Subindustry were combined and separate data are not available.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL												
United States, total.....	3,069	422	30.5	202.0	24.8	53.1	154.6	481.7	228.4	625.4	84.7	36.4	459.3
Geographic Area													
New England Division.....	177	21	1.6	10.2	1.3	2.8	8.2	21.3	10.0	28.7	2.7	1.9	21.3
New Hampshire.....	20	2	0.2	0.9	0.1	0.3	0.7	2.2	0.9	2.6	0.5	(NA)	(NA)
Vermont.....	11	1	0.1	0.5	0.1	0.2	0.4	1.0	0.5	1.4	0.1	(NA)	(NA)
Middle Atlantic Division.....	331	46	3.5	25.3	2.9	6.1	19.1	63.5	26.2	80.7	9.1	3.5	48.4
New Jersey.....	69	10	0.7	4.7	0.5	1.2	3.4	12.8	5.4	16.4	1.9	0.8	11.5
East North Central Division.....	841	95	7.3	51.1	5.8	12.4	39.3	124.9	52.7	157.1	20.5	7.9	104.3
Ohio.....	261	36	2.3	15.1	1.9	3.9	11.6	38.3	14.5	48.2	4.7	2.3	33.7
Illinois.....	142	19	1.3	9.7	1.1	2.4	8.2	22.9	9.9	28.0	4.8	1.7	18.8
Michigan.....	188	21	1.6	11.6	1.3	2.7	8.9	27.8	12.1	35.7	4.2	1.7	23.2
West North Central Division.....	511	42	3.6	21.8	3.0	6.4	17.5	46.9	24.8	64.4	7.3	4.4	47.1
Missouri.....	62	6	0.5	2.8	0.4	0.9	2.3	5.5	2.7	7.2	1.0	0.6	7.7
Nebraska.....	111	8	0.7	3.7	0.5	1.1	2.9	7.8	4.2	11.0	1.0	(NA)	(NA)
South Atlantic Division.....	230	41	3.1	17.3	2.5	5.8	13.1	42.9	21.5	57.0	7.5	3.7	44.5
Virginia.....	36	9	0.7	3.7	0.6	1.3	3.0	8.3	4.2	11.1	1.4	0.7	7.6
Florida.....	44	5	0.4	2.2	0.3	0.7	1.7	6.0	3.4	8.4	1.0	(NA)	(NA)
East South Central Division.....	155	31	1.9	10.3	1.6	3.5	7.7	25.2	12.6	33.3	4.6	2.1	21.1
West South Central Division.....	330	74	4.0	22.5	3.5	8.0	18.0	55.7	34.2	76.2	13.7	4.2	43.7
Texas.....	190	35	2.1	12.9	1.8	4.2	9.7	29.7	21.9	42.1	9.5	2.3	24.6
Mountain Division.....	169	10	1.3	7.9	1.1	2.0	6.5	17.7	6.8	22.3	2.2	2.4	27.2
Montana.....	21	-	0.1	0.4	0.1	0.1	0.4	1.0	0.5	1.5	0.1	(NA)	(NA)
New Mexico.....	24	1	0.1	0.5	0.1	0.2	0.4	1.4	0.6	1.8	0.2	(NA)	(NA)
Pacific Division.....	325	62	4.3	35.6	3.1	6.2	25.3	83.6	39.4	105.7	17.3	6.3	101.7
Type of Operation													
Producing establishments, total.....	3,053	422	¹ 30.4	¹ 201.4	24.7	52.9	154.1	481.3	226.8	625.1	82.9	¹ 36.2	459.7
Mining only:													
Bank.....	52	1	0.3	1.6	0.2	0.5	1.3	3.9	2.2	5.4	0.7	0.8	10.0
Wet pit.....	16	1	0.1	0.8	0.1	0.2	0.7	2.3	0.9	2.8	0.4	0.3	3.7
Dry pit.....	102	4	0.6	4.0	0.6	1.2	3.5	10.1	4.1	12.4	1.9	0.9	8.2
River, lake or ocean.....	15	2	0.2	1.4	0.1	0.3	1.2	2.6	0.9	3.2	0.3	0.1	1.1
All other mining methods or combination of methods.....	24	1	0.1	0.8	0.1	0.3	0.7	2.3	1.2	3.2	0.3	(²)	(²)
Mining with preparation:													
Bank, wet pit, and dry pit:													
Screening.....	48	4	0.4	2.8	0.3	0.8	2.2	6.8	2.4	8.5	0.8	} 22.0	294.7
Crushing.....	42	2	0.4	2.2	0.3	0.7	2.0	5.4	2.4	7.1	0.7		
Washing and other preparation methods.....	865	234	14.4	98.1	11.7	25.4	75.7	243.3	116.4	314.1	45.6		
Bank and wet pit.....	79	14	1.0	7.1	0.8	1.9	5.6	18.4	7.0	23.1	2.3	(NA)	(NA)
Bank and dry pit.....	173	28	2.3	16.5	1.9	4.0	12.8	41.3	19.9	53.0	8.1	(NA)	(NA)
River, lake or ocean.....	131	38	2.5	17.6	2.1	4.8	15.0	44.2	18.6	55.9	6.8	4.0	47.0
All other mining methods or combination of methods with preparation ²	1,416	71	6.7	37.3	6.0	12.1	31.0	94.1	44.7	125.0	13.8	² 1.6	² 17.5
Preparation plants only.....	46	6	0.5	3.1	0.4	0.8	2.5	6.6	6.0	11.4	1.2	0.4	4.0
Nonproducing establishments.....	16	-	0.1	0.6	0.1	0.2	0.5	0.4	1.6	0.3	1.7	0.2	(³)

See footnotes at end of table

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1446.--INDUSTRIAL SAND													
United States, total.....	163	63	4.1	27.2	3.2	6.8	19.1	65.9	33.3	89.6	9.6	3.7	54.4
Glass sand subindustry.....	41	27	1.7	11.3	1.3	2.9	7.9	27.1	13.1	36.4	3.9	1.6	22.6
Molding sand subindustry.....	71	18	1.1	7.6	0.9	1.9	5.5	17.4	11.6	25.5	3.5	0.9	12.8
Industrial sand, n.e.c., subindustry.....	51	18	1.3	8.2	1.0	2.1	5.8	21.4	8.6	27.8	2.2	1.3	19.0
Geographic Area													
New England Division.....	6	2	0.1	0.5	0.1	0.1	0.4	1.2	0.6	1.5	0.2	0.1	0.7
Middle Atlantic Division.....	34	14	0.9	6.1	0.7	1.5	4.3	12.9	7.9	18.3	2.5	1.0	13.0
New Jersey.....	17	10	0.6	4.0	0.4	0.9	2.6	9.0	6.3	13.1	2.2	0.6	8.3
East North Central Division.....	48	17	1.3	9.7	1.0	2.1	6.7	25.1	11.5	33.2	3.4	1.1	19.3
Molding sand subindustry.....	30	10	0.5	3.8	0.4	0.9	2.7	10.0	6.1	14.3	1.9	0.3	5.2
Ohio.....	17	5	0.3	1.8	0.2	0.5	1.5	4.3	2.1	6.0	0.5	0.2	3.4
Illinois.....	9	6	0.6	4.7	0.4	1.0	3.0	11.1	5.5	15.0	1.6	0.5	8.5
Michigan.....	11	4	0.3	2.3	0.2	0.5	1.6	6.6	2.6	8.5	0.7	0.2	4.8
West North Central Division.....	10	4	0.2	1.3	0.2	0.4	1.0	3.8	2.0	5.2	0.6	0.2	3.3
Glass sand subindustry.....	3	2	0.1	0.5	0.1	0.2	0.4	0.8	0.7	1.3	0.2	(NA)	(NA)
Industrial sand, n.e.c., subindustry.....	4	2	0.1	0.7	0.1	0.2	0.6	2.5	1.2	3.3	0.4	0.1	2.1
Missouri.....	7	2	0.1	0.7	0.1	0.2	0.6	2.7	1.0	3.5	0.3	0.1	2.1
South Atlantic Division.....	16	9	0.7	4.4	0.5	1.1	2.8	7.5	4.1	10.4	1.2	0.7	7.3
East South Central Division.....	14	2	0.2	0.8	0.1	0.3	0.6	2.2	1.3	3.2	0.3	0.2	2.1
West South Central Division.....	16	10	0.4	2.1	0.4	0.8	1.7	5.7	3.1	8.1	0.6	0.3	4.0
Industrial sand, n.e.c., subindustry.....	10	7	0.3	1.3	0.3	0.5	1.1	3.7	1.8	5.0	0.5	0.2	2.9
Texas.....	9	4	0.2	0.9	0.2	0.3	0.7	2.4	1.2	3.4	0.2	0.1	1.3
Mountain Division.....	6	1	0.1	0.5	0.1	0.1	0.4	1.3	0.7	1.9	0.1	0.1	1.0
Pacific Division.....	13	4	0.2	1.7	0.1	0.3	1.2	6.2	2.2	7.9	0.5	0.2	3.8
Type of Operation													
Glass sand subindustry:													
Dry pit.....	22	16	1.1	7.2	0.9	2.0	5.8	19.9	8.3	26.2	2.1	1.1	17.2
All other establishments.....	20	11	0.6	4.2	0.4	0.9	2.1	7.2	4.8	10.3	1.8	1.0	5.5
Molding sand subindustry:													
Bank.....	10	3	0.1	0.9	0.1	0.2	0.7	2.2	1.4	3.0	0.6	(NA)	(NA)
Dry pit.....	37	7	0.5	2.9	0.4	0.8	2.3	8.0	4.3	10.6	1.7	(NA)	(NA)
All other establishments.....	24	8	0.5	3.8	0.4	0.9	2.4	7.1	6.0	11.9	1.2	1.0	3.2
Industrial sand, n.e.c., subindustry:													
Bank.....	5	1	0.1	0.4	(Z)	0.1	0.2	1.4	0.3	1.6	0.1	0.1	0.8
Dry pit.....	27	10	0.5	2.7	0.4	0.8	2.2	7.2	2.9	9.5	0.6	0.7	10.8
All other establishments.....	19	7	0.8	5.1	0.6	1.2	3.4	12.8	5.4	16.7	1.5	0.5	7.4

Note: Detail may not add to the total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹Includes data for separately reported central offices and related facilities.²For 1967, includes data for unspecified types of operation for which 1,300 employees were reported and value added amounting to \$66.3 million in 1963, included with "All other producing establishments."³Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeded capital expenditures.

TABLE 2B. General Statistics for Manufacturing Establishments With Mining Operations by Geographic Area: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	SAND AND GRAVEL MINING INCLUDED IN MANUFACTURES												
United States, total.....	333	27	2.5	13.9	2.5	4.8	13.9	54.7	9.1	63.8	(NA)	2.9	69.0
New England Division.....	27	-	0.1	0.6	0.1	0.2	0.6	2.6	0.2	2.8	(NA)	0.1	3.2
Massachusetts.....	12	-	(Z)	0.2	(Z)	0.1	0.2	1.0	0.1	1.1	(NA)	0.1	2.0
Middle Atlantic Division.....	33	1	0.2	0.8	0.2	0.3	0.8	6.0	0.7	6.7	(NA)	0.4	9.0
New York.....	22	-	0.1	0.5	0.1	0.2	0.5	4.6	0.5	5.1	(NA)	0.2	4.7
East North Central Division.....	61	5	0.5	2.6	0.5	1.0	2.6	10.5	1.6	12.1	(NA)	0.5	11.9
Ohio.....	12	1	0.1	0.4	0.1	0.2	0.4	1.9	0.2	2.1	(NA)	0.1	2.1
Wisconsin.....	16	2	0.1	0.6	0.1	0.2	0.6	3.1	0.4	3.5	(NA)	0.1	1.5
West North Central Division.....	50	4	0.3	1.7	0.3	0.6	1.7	3.8	0.6	4.4	(NA)	0.1	3.5
Minnesota.....	19	1	0.1	0.5	0.1	0.2	0.5	1.5	0.3	1.8	(NA)	(Z)	1.2
South Region.....	26	6	0.4	1.7	0.4	0.8	1.7	7.6	1.6	9.2	(NA)	0.5	9.7
Maryland.....	3	2	0.1	0.4	0.1	0.2	0.4	2.6	0.4	3.0	(NA)	0.1	1.3
West South Central Division.....	16	2	0.2	0.8	0.2	0.3	0.8	2.8	0.4	3.2	(NA)	0.2	3.9
Texas.....	9	1	0.1	0.5	0.1	0.2	0.5	1.8	0.2	2.0	(NA)	0.1	3.0
Mountain Division.....	67	4	0.5	3.0	0.5	0.9	3.0	9.7	2.6	12.3	(NA)	0.6	15.2
Arizona.....	15	2	0.1	1.1	0.2	0.4	1.1	4.7	1.6	6.3	(NA)	0.2	5.7
Utah.....	9	1	0.1	1.0	0.1	0.2	1.0	1.6	0.3	1.9	(NA)	(Z)	0.7
Pacific Division.....	69	7	0.5	3.6	0.5	1.0	3.6	14.6	1.7	16.2	(NA)	0.7	16.4
Washington.....	22	1	0.1	0.9	0.1	0.3	0.9	3.6	0.4	4.0	(NA)	0.1	2.9
Oregon.....	11	2	0.1	0.9	0.1	0.2	0.9	3.4	0.2	3.6	(NA)	(NA)	(NA)
California.....	31	4	0.3	1.5	0.3	0.5	1.5	6.8	1.1	7.9	(NA)	0.4	10.5

Note: Detail may not add to the total due to independent rounding.

Standard notes: -Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Under 50 thousand (or under 50 employees).

¹The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967

Item	1442.--Construction Sand and Gravel							
	United States, total	New England Division	Middle Atlantic Division		East North Central Division			
			Total	New Jersey	Total	Ohio	Illinois	Michigan
Establishments, total.....number..	3,069	177	331	69	841	261	142	188
With 1 to 19 employees.....do....	2,647	156	285	59	746	225	123	167
With 20 to 99 employees.....do....	403	21	43	10	92	36	19	20
With 100 employees or more.....do....	19	-	3	-	3	-	-	1
All employees (average for the year).....1,000..	30.5	1.6	3.5	0.7	7.3	2.3	1.3	1.6
Payroll (all employees), total for year..million dollars..	202.0	10.2	25.3	4.7	51.1	15.1	9.7	11.6
Production, development, and exploration workers:								
Average for the year.....1,000..	24.8	1.3	2.9	0.5	5.8	1.9	1.1	1.3
March.....do....	22.2	1.1	2.5	0.5	4.9	1.6	1.0	1.1
May.....do....	25.3	1.3	3.0	0.5	6.0	1.9	1.1	1.3
August.....do....	26.8	1.4	3.1	0.6	6.5	2.0	1.2	1.5
November.....do....	25.0	1.3	2.9	0.5	5.9	1.9	1.0	1.4
Man-hours.....millions..	53.1	2.8	6.1	1.2	12.4	3.9	2.4	2.7
January-March.....do....	11.2	0.6	1.2	0.2	2.4	0.8	0.4	0.5
April-June.....do....	13.7	0.8	1.6	0.3	3.2	1.0	0.6	0.7
July-September.....do....	15.0	0.8	1.7	0.3	3.6	1.1	0.7	0.8
October-December.....do....	13.2	0.7	1.6	0.3	3.1	1.0	0.6	0.7
Wages.....million dollars..	154.6	8.2	19.1	3.4	39.3	11.6	8.2	8.9
Supplemental labor cost not included in payroll.....do....	17.6	0.7	2.3	0.4	4.6	1.2	0.7	1.3
Legally required expenditures, including Social Security contributions.....do....	12.4	0.5	1.5	0.3	3.2	0.9	0.5	0.8
Payments for voluntary programs.....do....	5.2	0.2	0.8	0.2	1.4	0.4	0.2	0.4
Cost of supplies, etc., total.....do....	228.4	10.0	26.2	5.4	52.7	14.5	9.9	12.1
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	159.9	6.4	18.3	4.3	36.0	9.9	7.3	8.1
Cost of resales.....do....	7.2	0.3	0.7	0.1	2.3	0.5	0.2	1.0
Purchased fuels consumed.....do....	22.4	1.2	2.1	0.4	5.5	1.6	0.9	1.2
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	863.8	26.9	84.4	15.6	230.5	72.2	41.8	63.3
Cost.....million dollars..	15.6	0.7	1.8	0.3	4.6	1.5	0.8	1.1
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	23.2	1.5	3.3	0.3	4.2	1.0	0.7	0.6
Value of shipments and receipts (including resales), total.....do....	625.4	28.7	80.7	16.4	157.1	48.2	28.0	35.7
Value of resales.....do....	9.4	0.9	0.8	0.1	2.8	0.6	0.2	1.2
Value added in mining.....do....	481.7	21.3	63.5	12.8	124.9	38.3	22.9	27.8
Capital expenditures (except land and mineral rights), total.....do....	84.7	2.7	9.1	1.9	20.5	4.7	4.8	4.2
Mineral development and exploration.....do....	3.6	(Z)	0.1	0.1	1.7	0.1	0.8	0.6
New structures and additions.....do....	13.6	0.2	0.8	0.2	1.4	0.6	0.1	0.2
New machinery and equipment.....do....	55.5	2.2	6.1	1.5	14.1	3.4	3.1	2.6
Used plant and equipment.....do....	11.9	0.2	2.0	0.1	3.2	0.6	0.8	0.8
Gross book value of fixed assets, total.....do....	738.0	31.8	97.0	19.6	199.7	66.7	32.0	40.7
Mineral properties.....do....	74.3	1.7	11.0	3.1	25.2	10.0	2.5	5.3
Building and other structures (excluding land).....do....	116.4	6.8	15.2	3.3	23.1	10.0	3.1	3.6
Machinery and equipment.....do....	547.3	23.4	70.8	13.2	151.4	46.7	26.5	31.9
Mineral development and exploration expenditures, total.....do....	6.8	0.1	0.3	0.1	1.9	0.2	0.8	0.7
Capitalized.....do....	4.5	(Z)	0.1	0.1	1.7	0.1	0.8	0.6
Expensed.....do....	2.3	0.1	0.2	(Z)	0.2	0.1	(Z)	(Z)
Mineral rights and geological expenditures.....do....	33.6	0.1	0.9	0.2	25.9	12.7	0.3	12.3
Lease and land acquisition of nonproducing acreage.....do....	5.2	0.1	0.4	-	1.4	10.1	(Z)	0.1
Geological and geophysical.....do....	.2	-	0.1	0.1	(Z)	(Z)	(Z)	(Z)
Lease rents.....do....	28.3	(Z)	0.4	0.1	24.5	11.7	0.2	12.2
Net shipments of primary product ¹.....million short tons..	556.6	27.8	66.2	11.8	155.8	44.4	29.9	37.8
Crude minerals mined during 1967, by ownership.....do....	573.3	28.6	68.2	12.2	160.5	45.7	30.8	38.9
Production for own account.....do....	115.4	4.1	16.1	4.0	43.8	13.4	10.6	5.3
Production for accounts of others.....do....	19.7	0.9	2.4	0.3	2.2	0.3	(²)	0.4
Royalty production.....do....	137.1	0.5	4.5	1.5	35.7	9.6	5.8	10.7
Royalties paid.....million dollars..	11.3	(Z)	0.4	0.1	2.7	0.7	0.5	0.9
Undistributed.....million short tons..	301.1	23.1	45.2	6.4	78.8	22.4	³ 14.4	22.5
Man-hours worked by production, development, and exploration workers, total.....millions..	53.1	2.8	6.1	1.2	12.4	3.9	2.4	2.7
At mines, total.....do....	34.8	1.7	3.9	0.8	8.2	2.7	1.5	1.9
Underground.....do....	0.3	-	0.1	-	0.1	(Z)	(Z)	(Z)
Open-pit.....do....	29.2	1.4	3.3	0.6	6.9	2.3	1.1	1.7
Surface (including mine shops and yards).....do....	5.3	0.3	0.6	0.2	1.2	0.3	0.4	0.2
At preparation plants.....do....	18.3	1.0	2.2	0.4	4.2	1.2	0.9	0.9
Man-hours spent on exploration and development (included above).....do....	1.0	0.1	0.1	(Z)	0.1	(Z)	0.1	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1442.--Construction Sand and Gravel--Continued							
	West North Central Division				South Atlantic Division			East South Central Division
	Total	Missouri	North Dakota	Nebraska	Total	Virginia	Florida	
Establishments, total.....number..	511	62	(D)	111	230	36	44	155
With 1 to 19 employees.....do....	469	56	(D)	103	189	27	39	124
With 20 to 99 employees.....do....	41	6	(D)	8	36	7	5	31
With 100 employees or more.....do....	1	-	(D)	-	5	2	-	-
All employees (average for the year).....1,000..	3.6	0.5	(D)	0.7	3.1	0.7	0.4	1.9
Payroll (all employees), total for year..million dollars..	21.8	2.8	(D)	3.7	17.3	3.7	2.2	10.3
Production, development, and exploration workers:								
Average for the year.....1,000..	3.0	0.4	(D)	0.5	2.5	0.6	0.3	1.6
March.....do....	2.2	0.4	(D)	0.4	2.5	0.6	0.3	1.5
May.....do....	3.2	0.4	(D)	0.6	2.6	0.6	0.3	1.6
August.....do....	3.6	0.4	(D)	0.6	2.6	0.6	0.3	1.7
November.....do....	3.0	0.4	(D)	0.6	2.5	0.6	0.3	1.6
Man-hours.....millions..	6.4	0.9	(D)	1.1	5.8	1.3	0.7	3.5
January-March.....do....	1.0	0.2	(D)	0.1	1.4	0.3	0.2	0.8
April-June.....do....	1.7	0.2	(D)	0.3	1.5	0.3	0.2	0.9
July-September.....do....	2.0	0.2	(D)	0.4	1.5	0.3	0.2	0.9
October-December.....do....	1.6	0.2	(D)	0.3	1.4	0.3	0.2	0.9
Wages.....million dollars..	17.5	2.3	(D)	2.9	13.1	3.0	1.7	7.7
Supplemental labor cost not included in payroll.....do....	1.6	0.2	(D)	0.3	1.5	0.3	0.2	0.7
Legally required expenditures, including Social Security contributions.....do....	1.3	0.2	(D)	0.2	1.0	0.2	0.1	0.5
Payments for voluntary programs.....do....	0.2	(Z)	(D)	0.1	0.5	0.1	(Z)	0.2
Cost of supplies, etc., total.....do....	24.8	2.7	(D)	4.2	21.5	4.2	3.4	12.6
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	16.5	1.8	(D)	2.7	16.0	3.0	2.4	8.7
Cost of resales.....do....	0.8	0.1	(D)	0.1	0.9	0.2	0.2	0.4
Purchased fuels consumed.....do....	3.7	0.4	(D)	0.7	2.0	0.4	0.3	1.8
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	72.2	5.8	(D)	12.6	100.4	16.0	21.9	28.8
Cost.....million dollars..	1.4	0.1	(D)	0.2	1.7	0.3	0.4	0.6
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(D)	-	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	2.3	0.3	(D)	0.4	0.9	0.3	0.2	1.2
Value of shipments and receipts (including resales), total.....do....	64.4	7.2	(D)	11.0	57.0	11.1	8.4	33.3
Value of resales.....do....	1.0	0.1	(D)	0.1	1.1	0.2	0.2	0.5
Value added in mining.....do....	46.9	5.5	(D)	7.8	42.9	8.3	6.0	25.2
Capital expenditures (except land and mineral rights), total.....do....								
Mineral development and exploration.....do....	7.3	1.0	(D)	1.0	7.5	1.4	1.0	4.6
New structures and additions.....do....	0.3	0.1	(D)	0.1	0.6	(Z)	(Z)	0.2
New machinery and equipment.....do....	0.6	0.1	(D)	0.1	1.0	0.3	0.1	0.3
Used plant and equipment.....do....	5.3	0.7	(D)	0.8	4.7	1.0	0.6	3.1
Gross book value of fixed assets, total.....do....	1.1	0.2	(D)	0.1	1.1	0.1	0.2	1.0
Mineral properties.....do....	66.4	8.2	(D)	9.0	70.9	13.1	10.4	32.8
Building and other structures (excluding land).....do....	5.2	0.3	(D)	0.7	10.3	2.1	1.2	1.2
Machinery and equipment.....do....	12.0	1.3	(D)	1.0	9.6	1.6	1.1	3.8
Mineral development and exploration expenditures, total.....do....	49.1	6.6	(D)	7.3	50.9	9.3	8.1	27.9
Capitalized.....do....	1.5	0.1	(D)	0.1	1.1	0.1	0.3	0.5
Expensed.....do....	0.4	(Z)	(D)	0.1	0.7	0.1	0.1	0.4
Mineral rights and geological expenditures.....do....	1.1	0.1	(D)	0.1	0.4	(Z)	0.2	0.1
Lease and land acquisition of nonproducing acreage.....do....	0.8	0.1	(D)	0.1	1.4	0.3	(Z)	0.7
Geological and geophysical.....do....	0.2	(Z)	(D)	(Z)	0.8	0.2	(Z)	0.3
Lease rents.....do....	(Z)	-	(D)	-	(Z)	-	-	-
Net shipments of primary product ¹.....million short tons..	0.5	(Z)	(D)	(Z)	0.7	0.1	(Z)	0.5
Crude minerals mined during 1967, by ownership.....do....	63.7	7.3	(D)	11.5	51.9	8.8	10.3	28.6
Production for own account.....do....	65.6	7.5	(D)	11.8	53.5	9.1	10.6	29.5
Production for accounts of others.....do....	11.0	0.5	(D)	2.3	9.3	1.2	2.6	3.6
Royalty production.....do....	1.7	(³)	(D)	(³)	0.7	-	(³)	(³)
Royalties paid.....million dollars..	14.5	1.9	(D)	2.5	12.0	3.1	1.4	11.3
Undistributed.....million short tons..	1.0	0.1	(D)	0.2	0.9	0.3	0.1	0.7
Man-hours worked by production, development, and exploration workers, total.....millions..	38.4	³ 5.1	(D)	³ 7.0	31.5	4.8	³ 6.6	³ 14.6
At mines, total.....do....	6.4	0.9	(D)	1.1	5.8	1.3	0.7	3.5
Underground.....do....	4.3	0.5	(D)	0.9	3.7	0.9	0.5	2.4
Open-pit.....do....	(Z)	(Z)	(D)	-	0.1	-	-	-
Surface (including mine shops and yards).....do....	3.5	0.4	(D)	0.8	2.9	0.8	0.4	2.1
At preparation plants.....do....	0.7	0.1	(D)	0.1	0.8	0.1	0.1	0.4
Man-hours spent on exploration and development (included above).....do....	2.1	0.4	(D)	0.2	2.0	0.3	0.3	1.1
See footnotes at end of table.	0.1	(Z)	(D)	0.1	0.1	(Z)	(Z)	(Z)

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1442.—Construction Sand and Gravel—Continued				1446.—Industrial Sand			
	West South Central Division		Mountain Division	Pacific Division	United States			
	Total	Texas			Total	Glass sand subindustry	Molding sand subindustry	Industrial sand, n.e.c., subindustry
Establishments, total.....number..	330	190	169	325	163	41	71	51
With 1 to 19 employees.....do....	256	155	159	263	100	14	53	33
With 20 to 99 employees.....do....	73	34	9	57	58	24	18	16
With 100 employees or more.....do....	1	1	1	5	5	3	-	2
All employees (average for the year).....1,000..	4.0	2.1	1.3	4.3	4.1	1.7	1.1	1.3
Payroll (all employees), total for year..million dollars..	22.5	12.9	7.9	35.6	27.2	11.3	7.6	8.2
Production, development, and exploration workers:								
Average for the year.....1,000..	3.5	1.8	1.1	3.1	3.2	1.3	0.9	1.0
March.....do....	3.5	1.8	1.0	2.9	3.1	1.2	0.9	1.0
May.....do....	3.5	1.8	1.1	3.0	3.2	1.3	0.9	1.0
August.....do....	3.5	1.8	1.1	3.2	3.2	1.3	0.9	1.0
November.....do....	3.4	1.7	1.1	3.2	3.1	1.3	0.9	1.0
Man-hours.....millions..	8.0	4.2	2.0	6.2	6.8	2.9	1.9	2.1
January-March.....do....	1.9	1.1	0.4	1.4	1.6	0.7	0.5	0.5
April-June.....do....	2.0	1.1	0.5	1.5	1.7	0.7	0.5	0.5
July-September.....do....	2.1	1.1	0.6	1.7	1.8	0.7	0.5	0.5
October-December.....do....	1.9	1.0	0.5	1.6	1.7	0.7	0.5	0.6
Wages.....million dollars..	18.0	9.7	6.5	25.3	19.1	7.9	5.5	5.8
Supplemental labor cost not included in payroll.....do....	1.9	1.1	0.6	3.7	2.7	1.1	0.7	0.9
Legally required expenditures, including Social Security contributions.....do....	1.5	0.8	0.5	2.3	1.5	0.6	0.4	0.5
Payments for voluntary programs.....do....	0.4	0.3	0.1	1.4	1.2	0.5	0.3	0.5
Cost of supplies, etc., total.....do....	34.2	21.9	6.8	39.4	33.3	13.1	11.6	8.6
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	27.1	18.5	4.6	26.3	21.8	8.3	7.1	6.4
Cost of resales.....do....	0.3	0.1	0.1	1.3	0.2	(D)	(D)	(D)
Purchased fuels consumed.....do....	2.7	1.4	1.1	2.4	4.8	2.0	1.6	1.2
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	144.3	59.3	23.2	153.1	221.4	131.8	42.9	46.8
Cost.....million dollars..	2.1	1.0	0.5	2.1	3.3	(D)	(D)	(D)
Generated less sold.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	-	(NA)	(NA)
Contract work.....million dollars..	2.0	0.9	0.5	7.2	3.3	1.0	2.1	0.2
Value of shipments and receipts (including resales), total.....do....	76.2	42.1	22.3	105.7	89.6	36.4	25.5	27.8
Value of resales.....do....	0.4	0.1	0.2	1.7	0.2	(D)	(D)	(D)
Value added in mining.....do....	55.7	29.7	17.7	83.6	65.9	27.1	17.4	21.4
Capital expenditures (except land and mineral rights), total.....do....	13.7	9.5	2.2	17.3	9.6	3.9	3.5	2.2
Mineral development and exploration.....do....	0.3	0.2	(Z)	0.3	(Z)	(Z)	(Z)	(Z)
New structures and additions.....do....	1.1	0.9	0.3	7.9	1.7	0.8	0.5	0.4
New machinery and equipment.....do....	10.8	7.9	1.6	7.5	7.3	2.9	2.8	1.7
Used plant and equipment.....do....	1.5	0.5	0.2	1.6	0.5	0.2	0.2	0.1
Gross book value of fixed assets, total.....do....	85.7	51.3	25.7	128.0	122.9	62.9	22.9	37.1
Mineral properties.....do....	3.4	2.2	1.2	15.1	15.8	12.4	1.2	2.3
Building and other structures (excluding land).....do....	16.2	9.0	2.5	27.3	25.7	9.6	3.6	12.5
Machinery and equipment.....do....	66.1	40.0	22.0	85.6	81.3	40.9	18.1	22.3
Mineral development and exploration expenditures, total.....do....	1.0	0.8	0.3	0.2	0.1	0.1	(Z)	(Z)
Capitalized.....do....	.9	0.8	0.3	0.1	(Z)	(Z)	(Z)	(Z)
Expensed.....do....	.1	0.1	(Z)	0.1	0.1	0.1	(Z)	(Z)
Mineral rights and geological expenditures.....do....	0.9	0.6	0.4	2.6	0.9	0.4	0.4	(Z)
Lease and land acquisition of nonproducing acreage.....do....	0.3	0.3	(Z)	1.7	0.2	(Z)	0.2	(Z)
Geological and geophysical.....do....	(Z)	(Z)	-	(Z)	(Z)	-	(Z)	-
Lease rents.....do....	0.5	0.2	0.3	0.9	0.6	0.4	0.2	(Z)
Net shipments of primary product ¹.....million short tons..	60.3	33.5	16.7	85.7	17.5	6.7	6.4	4.6
Crude minerals mined during 1967, by ownership.....do....	62.1	34.5	17.2	88.3	23.2	8.7	8.5	6.0
Production for own account.....do....	7.5	4.2	1.5	18.5	13.0	4.2	4.0	4.8
Production for accounts of others.....do....	(³)	(³)	0.5	10.5	-	-	-	-
Royalty production.....do....	26.9	15.9	2.9	28.9	6.2	2.4	2.8	1.0
Royalties paid.....million dollars..	2.4	1.5	0.4	2.6	0.8	0.5	0.2	0.1
Undistributed.....million short tons..	² 27.7	³ 14.4	12.3	30.4	4.0	2.1	1.7	0.2
Man-hours worked by production, development, and exploration workers, total.....millions..	8.0	4.2	2.0	6.2	6.8	2.9	1.9	2.1
At mines, total.....do....	5.5	2.9	1.3	3.8	2.5	1.0	0.8	0.7
Underground.....do....	(Z)	(Z)	(Z)	-	(Z)	-	-	(Z)
Open-pit.....do....	4.8	2.6	1.1	3.3	1.9	0.8	0.6	0.5
Surface (including mine shops and yards).....do....	0.7	0.3	0.2	0.5	0.5	0.2	0.1	0.2
At preparation plants.....do....	2.5	1.3	0.7	2.4	4.3	1.8	1.1	1.4
Man-hours spent on exploration and development (included above).....do....	0.4	0.3	(Z)	0.1	0.1	0.1	-	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Selected Geographic Area: 1967—Continued

Item	1446.—Industrial Sand—Continued								
	Northeast Region		East North Central Division				West North Central Division	South Region	West Region
	Total	New Jersey	Total	Molding sand subindustry	Illinois	Michigan			
Establishments, total.....number..	40	17	48	30	9	11	10	46	19
With 1 to 19 employees.....do....	24	6	31	20	3	7	6	25	14
With 20 to 99 employees.....do....	15	10	14	10	4	3	4	20	5
With 100 employees or more.....do....	1	-	3	-	2	1	-	1	-
All employees (average for the year).....1,000..	1.0	0.6	1.3	0.5	0.6	0.3	0.2	1.3	0.3
Payroll (all employees), total for year..million dollars..	6.6	4.0	9.7	3.8	4.7	2.3	1.3	7.3	2.2
Production, development, and exploration workers:									
Average for the year.....1,000..	0.8	0.4	1.0	0.4	0.4	0.2	0.2	1.0	0.2
March.....do....	0.8	0.4	1.0	0.4	0.4	0.2	0.2	1.0	0.2
May.....do....	0.8	0.4	1.0	0.4	0.4	0.2	0.2	1.0	0.2
August.....do....	0.8	0.4	1.0	0.4	0.4	0.2	0.2	1.0	0.2
November.....do....	0.8	0.4	1.0	0.4	0.4	0.2	0.2	1.0	0.2
Man-hours.....millions..	1.6	0.9	2.1	0.9	1.0	0.5	0.4	2.2	0.4
January-March.....do....	0.4	0.2	0.5	0.2	0.2	0.1	0.1	0.6	0.1
April-June.....do....	0.4	0.2	0.5	0.2	0.2	0.1	0.1	0.6	0.1
July-September.....do....	0.4	0.2	0.6	0.2	0.3	0.1	0.1	0.6	0.1
October-December.....do....	0.4	0.2	0.6	0.2	0.3	0.1	0.1	0.6	0.1
Wages.....million dollars..	4.7	2.6	6.7	2.7	3.0	1.6	1.0	5.1	1.6
Supplemental labor cost not included in payroll.....do....	0.6	0.3	1.2	0.4	0.7	0.2	0.1	0.6	0.2
Legally required expenditures, including Social Security contributions.....do....	0.3	0.2	0.5	0.2	0.2	0.1	0.1	0.4	0.1
Payments for voluntary programs.....do....	0.3	0.2	0.6	0.2	0.4	0.1	0.1	0.2	0.1
Cost of supplies, etc., total.....do....	8.5	6.3	11.5	6.1	5.5	2.6	2.0	8.5	2.9
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	5.2	3.7	7.8	3.9	4.2	1.4	1.5	5.6	1.9
Cost of resales.....do....	(D)	(D)	(D)	-	(D)	-	-	(D)	-
Purchased fuels consumed.....do....	0.9	0.6	2.0	1.0	0.9	0.6	0.3	1.3	0.3
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	69.3	55.2	55.6	18.7	20.9	16.0	12.6	55.7	28.2
Cost.....million dollars..	(D)	(D)	(D)	0.3	(D)	0.2	0.2	(D)	0.3
Generated less sold.....million kw.-hrs..	-	-	(NA)	(NA)	(NA)	-	-	(NA)	-
Contract work.....million dollars..	1.2	1.1	1.0	0.9	0.1	0.4	(Z)	0.8	0.3
Value of shipments and receipts (including resales), total.....do....	19.8	13.1	33.2	14.3	15.0	8.5	5.2	21.7	9.7
Value of resales.....do....	(D)	(D)	(D)	-	(D)	-	-	(D)	-
Value added in mining.....do....	14.1	9.0	25.1	10.0	11.1	6.6	3.8	15.4	7.5
Capital expenditures (except land and mineral rights), total.....do....	2.8	2.2	3.4	1.9	1.6	0.7	0.6	2.2	0.6
Mineral development and exploration.....do....	-	-	(Z)	-	-	-	-	(Z)	(Z)
New structures and additions.....do....	0.6	0.6	0.7	0.4	0.2	0.1	0.2	0.2	(Z)
New machinery and equipment.....do....	2.0	1.6	2.5	1.3	1.4	3.4	0.4	1.9	0.6
Used plant and equipment.....do....	0.1	(Z)	0.2	0.1	(Z)	3.2	0.1	(Z)	0.1
Gross book value of fixed assets, total.....do....	29.0	18.1	42.4	13.6	23.0	10.4	8.1	33.6	9.7
Mineral properties.....do....	5.4	1.9	3.1	0.7	2.0	1.0	0.1	7.1	0.2
Building and other structures (excluding land).....do....	3.1	2.3	12.4	2.2	8.3	2.0	2.5	4.5	3.2
Machinery and equipment.....do....	20.5	13.9	27.0	10.7	12.7	7.4	5.4	22.0	6.4
Mineral development and exploration expenditures, total.....do....	(Z)	-	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	.1
Capitalized.....do....	-	-	(Z)	-	(Z)	-	(Z)	(Z)	(Z)
Expensed.....do....	(Z)	-	(Z)	(Z)	-	(Z)	(Z)	-	.1
Mineral rights and geological expenditures.....do....	(Z)	-	0.3	0.3	(Z)	0.3	(Z)	0.1	0.4
Lease and land acquisition of nonproducing acreage.....do....	(Z)	-	0.2	0.1	(Z)	0.1	(Z)	(Z)	-
Geological and geophysical.....do....	-	-	-	-	-	-	(Z)	-	-
Lease rents.....do....	-	-	0.2	0.2	(Z)	0.2	(Z)	0.1	0.4
Net shipments of primary product ¹.....million short tons..	3.5	(NA)	7.1	-	3.0	2.0	1.1	4.5	1.4
Crude minerals mined during 1967, by ownership.....do....	4.9	3.6	10.3	5.1	4.0	4.2	1.4	5.0	1.6
Production for own account.....do....	3.8	2.7	5.5	2.2	3.2	1.0	(⁵)	1.6	(⁵)
Production for accounts of others.....do....	-	-	-	-	-	-	-	-	-
Royalty production.....do....	0.4	(⁴)	2.8	(⁴)	(⁴)	(⁴)	(⁵)	1.9	(⁵)
Royalties paid.....million dollars..	(Z)	(D)	0.2	(D)	(D)	(D)	(D)	0.2	(D)
Undistributed.....million short tons..	0.7	⁴ 0.9	2.0	⁴ 2.9	⁴ 0.8	⁴ 3.2	⁵ 1.4	1.5	⁵ 1.6
Man-hours worked by production, development, and exploration workers, total.....millions..	1.6	0.9	2.1	0.9	1.0	0.5	0.4	2.2	0.4
At mines, total.....do....	0.8	0.5	0.7	0.3	0.3	0.2	0.1	0.8	0.1
Underground.....do....	-	-	-	-	-	-	(Z)	-	-
Open-pit.....do....	0.6	0.4	0.5	0.2	0.2	0.1	0.1	0.6	0.1
Surface (including mine shops and yards).....do....	0.1	0.1	0.2	0.1	0.1	(Z)	(Z)	(Z)	(Z)
At preparation plants.....do....	0.9	0.4	1.4	0.6	0.7	0.3	0.3	1.5	0.3
Man-hours spent on exploration and development (included above).....do....	-	-	0.1	-	-	-	(Z)	(Z)	-

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified.

¹Represents gross shipments less sand and gravel received for preparation.

²Production for own account, production for accounts of others, and royalty production are included with undistributed production.

³Production for accounts of others is included with undistributed production.

⁴Royalty production is included with undistributed production.

⁵Production for own account and royalty production are included with undistributed production.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967

Item	1442--Construction sand and gravel					
	All types of establishments, total	Mining only		Mining with preparation		
		Bank	Dry pit	Bank, wet pit, and dry pit		
				Screening	Crushing	Washing and other preparation methods
Establishments, total.....number..	3,069	52	102	48	42	865
With 1 to 19 employees.....do....	2,647	51	98	44	40	630
With 20 to 99 employees.....do....	403	1	4	4	2	223
With 100 employees or more.....do....	19	-	-	-	-	11
All employees (average for the year).....1,000..	30.5	0.3	0.6	0.4	0.4	14.4
Payroll (all employees), total for year..million dollars..	202.0	1.6	4.0	2.8	2.2	98.1
Production, development, and exploration workers:						
Average for the year.....1,000..	24.8	0.2	0.6	0.3	0.3	11.7
March.....do....	22.2	0.2	0.5	0.3	0.2	10.4
May.....do....	25.3	0.2	0.6	0.4	0.3	12.0
August.....do....	26.8	0.2	0.6	0.4	0.4	12.6
November.....do....	25.0	0.2	0.6	0.3	0.3	11.7
Man-hours.....millions..	53.1	0.5	1.2	0.8	0.7	25.4
January-March.....do....	11.2	0.1	0.2	0.1	0.1	5.2
April-June.....do....	13.7	0.1	0.3	0.2	0.2	6.7
July-September.....do....	15.0	0.1	0.3	0.2	0.2	7.3
October-December.....do....	13.2	0.1	0.3	0.2	0.2	6.3
Wages.....million dollars..	154.6	1.3	3.5	2.2	2.0	75.7
Supplemental labor cost not included in payroll.....do....	17.6	0.1	0.3	0.2	0.1	9.9
Legally required expenditures, including Social						
Security contributions.....do....	12.4	0.1	0.2	0.1	0.1	6.7
Payments for voluntary programs.....do....	5.2	(Z)	0.1	(Z)	(Z)	3.2
Cost of supplies, etc., total.....do....	228.4	2.2	4.1	2.4	2.4	116.4
Supplies used, minerals received for preparation,						
and purchased machinery installed.....do....	159.9	1.6	2.9	1.6	1.6	82.4
Cost of resales.....do....	7.2	(Z)	(Z)	0.1	(Z)	3.2
Purchased fuels consumed.....do....	22.4	0.3	0.5	0.3	0.5	10.1
Electric energy:						
Purchased:						
Quantity.....million kw.-hrs..	863.8	1.8	13.0	4.6	4.3	487.1
Cost.....million dollars..	15.6	0.1	0.2	0.1	0.1	8.3
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	23.2	0.2	0.5	0.3	0.2	12.4
Value of shipments and receipts (including resales),						
total.....do....	625.4	5.4	12.4	8.5	7.1	314.1
Value of resales.....do....	9.4	(Z)	(Z)	0.1	0.6	3.7
Value added in mining.....do....	481.7	3.9	10.1	6.8	5.4	243.3
Capital expenditures (except land and mineral rights),						
total.....do....	84.7	0.7	1.9	0.8	0.7	45.6
Mineral development and exploration.....do....	3.6	(Z)	(Z)	(Z)	(Z)	2.0
New structures and additions.....do....	13.6	-	0.2	(Z)	0.1	10.3
New machinery and equipment.....do....	55.5	0.6	1.4	0.6	0.5	27.6
Used plant and equipment.....do....	11.9	0.1	0.2	0.1	0.2	5.7
Gross book value of fixed assets, total.....do....	738.0	5.7	15.4	7.9	6.4	360.9
Mineral properties.....do....	74.3	0.2	2.7	0.5	0.3	39.2
Building and other structures (excluding land).....do....	116.4	0.4	3.0	1.5	0.9	63.2
Machinery and equipment.....do....	547.3	5.1	9.7	5.9	5.3	258.5
Mineral development and exploration expenditures,						
total.....do....	6.8	0.1	0.1	(Z)	(Z)	3.4
Capitalized.....do....	4.5	(Z)	0.1	(Z)	(Z)	2.3
Expensed.....do....	2.3	(Z)	(Z)	(Z)	(Z)	1.1
Mineral rights and geological expenditures.....do....	33.6	0.2	1.7	0.1	(Z)	15.6
Lease and land acquisition of nonproducing acreage.....do....	5.2	0.1	(D)	(Z)	(Z)	1.4
Geological and geophysical.....do....	0.2	-	(D)	-	-	(Z)
Lease rents.....do....	28.3	0.1	(D)	0.1	(Z)	14.3
Net shipments of primary product ¹.....million short tons..	556.6	(NA)	(NA)	(NA)	(NA)	(NA)
Crude minerals mined during 1967, by ownership.....do....	573.3	5.2	11.5	7.7	5.7	286.7
Production for own account.....do....	115.4	0.4	2.3	0.8	0.4	66.4
Production for accounts of others.....do....	19.7	(²)	1.2	(²)	(²)	9.6
Royalty production.....do....	137.1	3.0	0.7	1.7	0.9	88.7
Royalties paid.....million dollars..	11.3	0.1	0.1	0.2	0.1	7.3
Undistributed.....million short tons..	301.1	² 1.8	7.3	² 5.2	² 4.4	122.0
Man-hours worked by production, development, and						
exploration workers, total.....millions..	53.1	0.5	1.2	0.8	0.7	25.4
At mines, total.....do....	34.8	0.4	1.2	0.6	0.4	17.0
Underground.....do....	0.3	-	(Z)	(Z)	(Z)	0.2
Open-pit.....do....	29.2	0.4	1.0	0.5	0.3	14.3
Surface (including mine shops and yards).....do....	5.3	(Z)	0.1	0.1	(Z)	2.6
At preparation plants.....do....	18.3	-	-	0.2	0.3	8.4
Man-hours spent on exploration and development						
(included above).....do....	1.0	(Z)	(Z)	-	(Z)	0.5

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1442.--Construction sand and gravel--Continued				
	Mining with preparation--Continued				Preparation plants only
	Bank and wet pit	Bank and dry pit	River, lake, or ocean	All other methods or combination of methods with preparation	
Establishments, total.....number..	79	173	131	1,416	46
With 1 to 19 employees.....do....	65	145	93	1,345	40
With 20 to 99 employees.....do....	14	27	35	68	6
With 100 employees or more.....do....	-	1	3	3	-
All employees (average for the year).....1,000..	1.0	2.3	2.5	6.7	0.5
Payroll (all employees), total for year..million dollars..	7.1	16.5	17.6	37.3	3.1
Production, development, and exploration workers:					
Average for the year.....1,000..	0.8	1.9	2.1	6.0	0.4
March.....do....	0.7	1.5	1.9	5.7	0.4
May.....do....	0.9	1.9	2.1	6.1	0.4
August.....do....	0.9	2.2	2.3	6.2	0.4
November.....do....	0.9	1.9	2.2	6.1	0.4
Man-hours.....millions..	1.9	4.0	4.8	12.1	0.8
January-March.....do....	0.4	0.7	1.0	2.9	0.2
April-June.....do....	0.5	1.0	1.2	3.0	0.2
July-September.....do....	0.5	1.3	1.3	3.1	0.2
October-December.....do....	0.5	1.0	1.2	3.0	0.2
Wages.....million dollars..	5.6	12.8	15.0	31.0	2.5
Supplemental labor cost not included in payroll.....do....	0.6	1.7	1.9	2.5	0.2
Legally required expenditures, including Social Security contributions.....do....	0.4	1.1	1.3	2.0	0.2
Payments for voluntary programs.....do....	0.2	0.5	0.5	0.5	(Z)
Cost of supplies, etc., total.....do....	7.0	19.9	18.6	44.7	6.0
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	4.9	14.4	13.6	29.9	4.7
Cost of resales.....do....	0.3	0.6	1.2	1.5	0.3
Purchased fuels consumed.....do....	0.8	1.7	1.8	5.6	0.3
Electric energy:					
Purchased:					
Quantity.....million kw.-hrs..	55.7	69.2	62.1	146.1	9.1
Cost.....million dollars..	1.0	1.3	0.9	3.3	0.2
Generated less sold.....million kw.-hrs..	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work.....million dollars..	0.1	1.9	1.1	4.4	0.5
Value of shipments and receipts (including resales), total.....do....	23.1	53.0	55.9	125.0	11.4
Value of resales.....do....	0.3	0.6	1.5	2.1	0.3
Value added in mining.....do....	18.4	41.3	44.2	94.1	6.6
Capital expenditures (except land and mineral rights), total.....do....	2.3	8.1	6.8	13.8	1.2
Mineral development and exploration.....do....	(Z)	0.7	(Z)	0.6	(Z)
New structures and additions.....do....	0.1	0.5	0.3	(D)	(D)
New machinery and equipment.....do....	1.9	6.1	5.7	(D)	(D)
Used plant and equipment.....do....	0.2	0.9	0.8	(D)	(D)
Gross book value of fixed assets, total.....do....	28.7	71.4	79.6	139.5	10.1
Mineral properties.....do....	3.6	12.1	8.4	5.7	0.6
Building and other structures (excluding land).....do....	2.2	6.8	9.7	24.2	1.5
Machinery and equipment.....do....	22.8	52.5	61.6	109.6	8.1
Mineral development and exploration expenditures, total.....do....	0.3	1.0	0.7	1.0	(Z)
Capitalized.....do....	0.2	0.7	0.6	0.6	(Z)
Expensed.....do....	0.1	0.3	0.1	0.4	(Z)
Mineral rights and geological expenditures.....do....	0.4	1.0	0.4	1.8	(Z)
Lease and land acquisition of nonproducing acreage.....do....	(Z)	0.3	0.1	1.3	(Z)
Geological and geophysical.....do....	(Z)	(Z)	-	(Z)	-
Lease rents.....do....	0.3	0.7	0.3	0.5	(Z)
Net shipments of primary product ¹.....million short tons..	(NA)	(NA)	(NA)	(NA)	(NA)
Crude minerals mined during 1967, by ownership.....do....	21.2	48.7	51.0	114.7	-
Production for own account.....do....	8.7	14.7	13.5	4.5	-
Production for accounts of others.....do....	(²)	3.3	(²)	3.2	-
Royalty production.....do....	5.8	14.0	7.8	11.4	-
Royalties paid.....million dollars..	0.4	1.2	0.6	1.0	-
Undistributed.....million short tons..	² 6.7	16.7	² 29.7	95.6	-
Man-hours worked by production, development, and exploration workers, total.....millions..	1.9	4.0	4.8	12.1	0.9
At mines, total.....do....	1.2	2.3	2.7	8.1	-
Underground.....do....	-	-	-	(Z)	-
Open-pit.....do....	0.9	1.8	2.3	6.8	-
Surface (including mine shops and yards).....do....	0.2	0.5	0.4	1.2	-
At preparation plants.....do....	0.7	1.7	2.1	4.0	0.9
Man-hours spent on exploration and development (included above).....do....	0.1	0.1	0.1	0.1	-

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1967-Continued

Item	1446.-Industrial sand						
	All types of establishments, total	Glass sand subindustry		Molding sand subindustry		Industrial sand, n.e.c. subindustry	
		All establishments, total	Dry pit	All establishments, total	Dry pit	All establishments, total	Dry pit
Establishments, total.....number..	163	41	22	71	37	51	27
With 1 to 19 employees.....do....	100	14	6	53	30	33	17
With 20 to 99 employees.....do....	58	24	13	18	7	16	10
With 100 employees or more.....do....	5	3	3	-	-	2	-
All employees (average for the year).....1,000..	4.1	1.7	1.1	1.1	0.5	1.3	0.5
Payroll (all employees), total for year..million dollars..	27.2	11.3	7.2	7.6	2.9	8.2	2.7
Production, development, and exploration workers:							
Average for the year.....1,000..	3.2	1.3	0.9	0.9	0.4	1.0	0.4
March.....do....	3.1	1.2	0.9	0.9	0.4	1.0	0.4
May.....do....	3.2	1.3	0.9	0.9	0.4	1.0	0.4
August.....do....	3.2	1.3	0.9	0.9	0.4	1.0	0.4
November.....do....	3.1	1.3	0.9	0.9	0.4	1.0	0.4
Man-hours.....millions..	6.8	2.9	2.0	1.9	0.8	2.1	0.8
January-March.....do....	1.6	0.7	0.5	0.5	0.2	0.5	0.2
April-June.....do....	1.7	0.7	0.5	0.5	0.2	0.5	0.2
July-September.....do....	1.8	0.7	0.5	0.5	0.2	0.5	0.2
October-December.....do....	1.7	0.7	0.5	0.5	0.2	0.6	0.2
Wages.....million dollars..	19.1	7.9	5.8	5.5	2.3	5.8	2.2
Supplemental labor cost not included in payroll.....do....	2.7	1.1	0.8	0.7	0.3	0.9	0.2
Legally required expenditures, including Social Security contributions.....do....	1.5	0.6	0.4	0.4	0.2	0.5	0.2
Payments for voluntary programs.....do....	1.2	0.5	0.3	0.3	0.1	0.5	(Z)
Cost of supplies, etc., total.....do....	33.3	13.1	8.3	11.6	4.3	8.6	2.9
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	21.8	8.3	5.6	7.1	2.8	6.4	2.0
Cost of resales.....do....	0.2	(D)	(D)	(D)	(D)	(D)	(D)
Purchased fuels consumed.....do....	4.8	2.0	1.3	1.6	0.8	1.2	0.5
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	221.4	131.8	78.3	42.9	17.6	46.8	26.3
Cost.....million dollars..	3.3	(D)	(D)	(D)	(D)	(D)	(D)
Generated less sold.....million kw.-hrs..	(NA)	-	-	(NA)	-	(NA)	(NA)
Contract work.....million dollars..	3.3	1.0	0.4	2.1	0.6	0.2	0.1
Value of shipments and receipts (including resales), total.....do....	89.6	36.4	26.2	25.5	10.6	27.8	9.5
Value of resales.....do....	0.2	(D)	(D)	(D)	(D)	(D)	(D)
Value added in mining.....do....	65.9	27.1	19.9	17.4	8.0	21.4	7.2
Capital expenditures (except land and mineral rights), total.....do....	9.6	3.9	2.1	3.5	1.7	2.2	0.6
Mineral development and exploration.....do....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
New structures and additions.....do....	1.7	0.8	0.1	0.5	0.4	0.4	0.1
New machinery and equipment.....do....	7.3	2.8	1.8	2.8	1.2	1.7	0.5
Used plant and equipment.....do....	0.5	0.2	0.1	0.2	0.1	0.1	(Z)
Gross book value of fixed assets, total.....do....	122.9	62.9	43.1	22.9	10.8	37.1	11.2
Mineral properties.....do....	15.8	12.4	10.4	1.2	0.2	2.3	0.3
Building and other structures (excluding land).....do....	25.7	9.6	6.4	3.6	1.8	12.5	3.4
Machinery and equipment.....do....	81.3	40.9	26.4	18.1	8.8	22.3	7.5
Mineral development and exploration expenditures, total.....do....	0.1	0.1	0.1	(Z)	(Z)	(Z)	(Z)
Capitalized.....do....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	-
Expensed.....do....	0.1	0.1	0.1	(Z)	-	(Z)	(Z)
Mineral rights and geological expenditures.....do....	0.9	0.4	0.4	0.4	0.1	(Z)	(Z)
Lease and land acquisition of nonproducing acreage.....do....	0.2	(Z)	(Z)	0.2	(Z)	(Z)	(Z)
Geological and geophysical.....do....	(Z)	-	-	(Z)	-	-	-
Lease rents.....do....	0.6	0.4	0.4	0.2	0.1	(Z)	(Z)
Net shipments of primary product ¹.....million short tons..	17.5	6.7	(NA)	6.4	(NA)	4.6	(NA)
Crude minerals mined during 1967, by ownership.....do....	23.2	8.7	6.0	8.5	3.2	6.0	1.6
Production for own account.....do....	13.0	4.2	3.1	4.0	2.0	4.8	0.9
Production for accounts of others.....do....	-	-	-	-	-	-	-
Royalty production.....do....	6.2	2.4	(³)	2.8	0.8	1.0	0.4
Royalties paid.....million dollars..	0.8	0.5	(D)	0.2	0.1	0.1	0.1
Undistributed.....million short tons..	4.0	2.1	³ 2.9	1.7	0.4	0.2	0.3
Man-hours worked by production, development, and exploration workers, total.....millions..	6.8	2.9	2.0	1.9	0.8	2.1	0.8
At mines, total.....do....	2.5	1.0	0.6	0.8	0.3	0.7	0.3
Underground.....do....	(Z)	-	-	-	-	(Z)	-
Open-pit.....do....	1.9	0.8	0.5	0.6	0.3	0.5	0.2
Surface (including mine shops and yards).....do....	0.5	0.2	0.1	0.1	0.1	0.2	(Z)
At preparation plants.....do....	4.3	1.8	1.4	1.1	0.5	1.4	0.5
Man-hours spent on exploration and development (included above).....do....	0.1	0.1	(Z)	-	-	(Z)	-

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosure of individual company data. (Z) Less than one-half of the unit of measure specified.

¹Represents gross shipments less sand and gravel received for preparation.²Production for accounts of others is included with undistributed production.³Royalty production is included with undistributed production.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures
			Number	Payroll	Number	Man-hours	Wages				
			(number)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
1442	Construction sand and gravel: Establishments, total.....	3 069	30.5	202.0	24.8	53.1	154.6	481.7	228.4	625.4	84.7
	Establishments with an average of--										
	0 to 4 employees.....	1 470	2.4	13.6	2.3	4.2	11.6	45.8	23.4	61.1	8.2
	5 to 9 employees.....	623	4.2	27.2	3.5	7.4	22.0	66.9	33.6	86.9	13.5
	10 to 19 employees.....	554	7.5	50.6	6.0	13.2	39.1	119.7	55.0	156.7	18.1
	20 to 49 employees.....	353	10.3	68.1	8.4	18.4	52.4	163.8	77.3	213.5	27.6
	50 to 99 employees.....	50	3.2	22.5	2.6	5.8	16.8	47.6	19.4	60.6	6.4
	100 to 249 employees.....	18	2.8	20.0	2.0	4.1	12.6	37.8	19.7	46.6	10.9
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	-	-	-	-	-	-	-	-	-	-
	1,000 to 2,499 employees.....	-	-	-	-	-	-	-	-	-	-
	2,500 employees or more.....	-	-	-	-	-	-	-	-	-	-
	Estabs. covered by admin. records ¹	881	1.1	5.3	1.1	1.7	4.6	18.4	8.9	25.1	2.3
1446	Industrial sand: Establishments, total.....	163	4.1	27.2	3.2	6.8	19.1	65.9	33.3	89.6	9.6
	Establishments with an average of--										
	0 to 4 employees.....	41	0.1	0.5	0.1	0.2	0.3	1.4	0.4	1.6	0.1
	5 to 9 employees.....	27	0.2	1.2	0.2	0.3	0.8	2.8	1.6	3.9	0.6
	10 to 19 employees.....	32	0.5	2.9	0.3	0.7	2.2	7.3	2.9	9.3	0.9
	20 to 49 employees.....	45	1.4	9.6	1.1	2.5	6.8	24.1	13.9	34.0	3.9
	50 to 99 employees.....	13	0.9	6.1	0.7	1.4	4.1	13.1	8.7	19.3	2.5
	100 to 249 employees.....	3	1.0	7.0	0.7	1.6	5.1	17.1	5.9	21.5	1.6
	250 to 499 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establishments covered by admin. records ¹	15	(Z)	0.1	(Z)	(Z)	(Z)	0.4	0.1	0.5	(Z)
	Glass sand subindustries: Establishments, total.....	41	1.7	11.3	1.3	2.9	7.9	27.1	13.1	36.4	3.9
	Establishments with an average of--										
	0 to 4 employees.....	5	(Z)	0.1	(Z)	(Z)	0.1	0.7	0.4	0.9	0.2
	5 to 9 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	(Z)	0.4	(Z)	0.1	0.3	1.3	0.7	1.9	0.1
	20 to 49 employees.....	18	0.6	3.6	0.5	1.1	2.8	9.4	5.0	13.0	1.4
	50 to 99 employees.....	6	1.0	7.0	0.7	1.6	4.7	15.7	7.0	20.6	2.1
	100 to 249 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Molding sand subindustries: Establishments, total.....	71	1.1	7.6	0.9	1.9	5.5	17.4	11.6	25.5	3.5
	Establishments with an average of--										
	0 to 4 employees.....	25	0.1	0.9	0.1	0.3	0.6	2.2	0.9	2.7	0.4
	5 to 9 employees.....	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	13	0.2	1.1	0.1	0.3	0.9	2.7	1.1	3.4	0.4
	20 to 49 employees.....	13	0.4	3.4	0.3	0.7	2.1	7.4	5.5	11.1	1.7
	50 to 99 employees.....	5	0.3	2.3	0.3	0.6	1.9	5.0	4.2	8.2	1.0
	Estabs. covered by admin. records ¹ ..	9	(Z)	0.1	(Z)	(Z)	(Z)	0.3	0.1	0.3	(Z)
	Industrial sand, n.e.c. subindustries: Establishments, total.....	51	1.3	8.2	1.0	2.1	5.8	21.4	8.6	27.8	2.2
	Establishments with an average of--										
	0 to 4 employees.....	11	(Z)	0.2	(Z)	0.1	0.1	0.6	0.2	0.7	(Z)
	5 to 9 employees.....	8	0.1	0.3	0.1	0.1	0.3	0.7	0.5	1.2	0.1
	10 to 19 employees.....	14	0.3	1.4	0.2	0.3	1.0	3.3	1.1	4.0	0.4
	20 to 49 employees.....	14	0.4	2.6	0.3	0.7	1.9	7.3	3.4	9.9	0.8
	50 to 99 employees.....	4	0.6	3.8	0.4	0.8	2.6	9.5	3.4	12.0	1.0
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹ ..	5	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.2	(Z)

Note: Detailed figures may not add to totals because of independent rounding.

Standard Notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures shown above. - Represents zero. (Z) Less than 50 thousand or 50 employees. n.e.c. Not elsewhere classified.
¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls and sales for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1442	Construction sand and gravel.....1967..	625.4	581.0	25.7	9.3	9.4	¹ 659.2	570.9	¹ 88.3
	1963..	607.5	578.1	18.5	3.6	7.4	¹ 661.0	575.0	¹ 86.0
1446	Industrial sand.....1967..	89.6	67.1	21.4	0.9	0.2	90.7	65.8	24.9
	1963..	70.5	50.5	19.7	0.1	0.3	70.2	49.8	20.4
	Glass sand subindustry.....1967..	36.4	25.4	(D)	(D)	(D)	34.0	25.3	8.7
	1963..	29.1	21.2	7.7	-	0.2	27.1	21.0	6.0
	Molding sand subindustry.....1967..	25.5	21.4	(D)	(D)	(D)	27.8	20.8	7.0
	1963..	16.6	14.1	2.6	0.1	(Z)	20.7	13.8	6.9
	Industrial sand, n.e.c., subindustry..1967..	27.8	20.4	7.2	(D)	(D)	29.0	19.8	9.2
	1963..	24.8	15.3	9.4	-	0.1	22.4	15.0	7.4

Note: Detailed figures may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹Represents the value of net shipments, plus the approximate value of sand and gravel produced and used in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	UNITED STATES						
1442- --	Construction sand and gravel, total.....	618.3	596.7	659.2	602.2	588.3	629.2
	Construction sand, total.....	207.3	203.0	216.4	271.6	263.3	265.2
14421 01	Run of pit or bank.....	32.7	31.8	28.9	32.9	32.3	26.8
14422 01	Washed, screened, ground, or otherwise prepared.....	174.7	171.2	187.5	238.7	231.0	238.4
	Gravel, total.....	228.6	224.8	271.9	334.7	324.9	364.1
14421 05	Run of pit or bank.....	39.4	38.8	34.4	45.1	44.1	35.2
14422 05	Washed, screened, or otherwise prepared.....	189.1	185.9	237.6	289.6	280.9	328.8
14420 00	Construction sand and gravel, n.s.k.....	¹ 182.3	¹ 168.9	¹ 171.0	(2)	(2)	(2)
14420 01							
	NEW ENGLAND						
1442- --	Construction sand and gravel, total.....	30.5	29.5	31.3	32.3	30.0	30.9
	Construction sand, total.....	8.0	7.8	8.2	16.9	15.6	15.5
14421 01	Run of pit or bank.....	1.9	2.0	1.8	2.0	1.9	1.4
14422 01	Washed, screened, ground, or otherwise prepared.....	6.1	5.8	6.4	14.9	13.7	14.1
	Gravel, total.....	7.7	7.6	9.6	15.5	14.4	15.5
14421 05	Run of pit or bank.....	2.0	2.0	1.8	3.3	3.1	1.9
14422 05	Washed, screened, or otherwise prepared.....	5.7	5.7	7.9	12.2	11.3	13.6
14420 00	Construction sand and gravel, n.s.k.....	¹ 14.8	¹ 14.1	¹ 13.5	(2)	(2)	(2)
14420 11							
	Maine:						
1442- --	Construction sand and gravel.....	1.1	1.1	1.0	(NA)	(NA)	(NA)
	New Hampshire:						
1442- --	Construction sand and gravel, total.....	3.0	2.8	2.9	(NA)	(NA)	(NA)
14421 01	Construction sand.....	0.8	0.7	0.6			
14421 05	Gravel.....	0.5	0.5	0.7			
14422 05	Washed, screened, or otherwise prepared.....	¹ 1.7	¹ 1.7	¹ 1.7			
14420 00	Construction sand and gravel, n.s.k.....	¹ 1.7	¹ 1.7	¹ 1.7			
	Vermont:						
1442- --	Construction sand and gravel.....	2.0	2.0	2.0	(NA)	(NA)	(NA)
	Massachusetts:						
1442- --	Construction sand and gravel, total.....	13.5	12.8	13.6	(NA)	(NA)	(NA)
	Construction sand, total.....	4.3	4.1	4.3			
14421 01	Run of pit or bank.....	0.7	0.7	0.6			
14422 01	Washed, screened, ground, or otherwise prepared.....	3.6	3.4	3.7			
	Gravel, total.....	4.4	4.5	5.6			
14421 05	Run of pit or bank.....	1.2	1.2	1.2			
14422 05	Washed, screened, or otherwise prepared.....	3.2	3.3	4.4			
14420 00	Construction sand and gravel, n.s.k.....	¹ 4.8	¹ 4.2	¹ 3.7	(NA)	(NA)	(NA)
14420 01							
	Rhode Island:						
1442- --	Construction sand and gravel, total.....	3.9	3.8	4.1	(NA)	(NA)	(NA)
14421 01	Construction sand.....	1.5	1.5	1.4			
14421 05	Gravel.....	1.2	1.2	1.3			
14422 05	Washed, screened, or otherwise prepared.....	¹ 1.2	¹ 1.2	¹ 1.4			
14420 00	Construction sand and gravel, n.s.k.....	¹ 1.2	¹ 1.2	¹ 1.4			
14420 01							
	Connecticut:						
1442- --	Construction sand and gravel.....	7.0	7.0	7.6	(NA)	(NA)	(NA)
	MIDDLE ATLANTIC						
1442- --	Construction sand and gravel, total.....	72.7	69.9	88.8	57.2	54.6	67.0
	Construction sand, total.....	31.2	30.5	37.3	32.2	30.8	36.6
14421 01	Run of pit or bank.....	5.0	4.9	4.6	3.3	3.3	2.9
14422 01	Washed, screened, ground, or otherwise prepared.....	26.2	25.6	32.7	28.9	27.5	33.7
	Gravel, total.....	19.4	19.0	25.3	25.0	23.8	30.4
14421 05	Run of pit or bank.....	5.2	5.1	4.4	3.9	3.8	2.8
14422 05	Washed, screened, or otherwise prepared.....	14.2	13.9	20.9	21.1	20.0	27.5
14420 00	Construction sand and gravel, n.s.k.....	¹ 22.2	¹ 20.4	¹ 26.2	(2)	(2)	(2)
14420 01							

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	MIDDLE ATLANTIC--Continued						
	New York:						
1442- --	Construction sand and gravel, total.....	34.0	31.7	38.0	29.1	26.9	30.9
	Construction sand, total.....	10.9	10.5	11.6	16.7	15.7	17.9
14221 01	Run of pit or bank.....	2.5	2.5	2.0	1.6	1.6	1.0
14422 01	Washed, screened, ground, or otherwise prepared.....	8.4	8.0	9.6	15.2	14.2	16.8
	Gravel, total.....	7.4	7.2	8.9	12.4	11.1	13.0
14421 05	Run of pit or bank.....	3.0	3.0	2.4	3.0	3.0	2.0
14422 05	Washed, screened, or otherwise prepared.....	4.4	4.2	6.5	9.4	8.2	11.1
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 15.7	¹ 14.0	¹ 17.6	(²)	(²)	(²)
	New Jersey:						
1442- --	Construction sand and gravel, total.....	15.7	15.5	18.2	13.3	13.3	15.7
	Construction sand, total.....	8.7	8.6	9.1	7.4	7.2	7.7
14421 01	Run of pit or bank.....	1.9	1.9	1.9	1.4	1.4	1.4
14422 01	Washed, screened, ground, or otherwise prepared.....	6.8	6.7	7.2	6.0	5.8	6.3
	Gravel, total.....	4.7	4.6	6.0	5.9	6.1	8.0
14421 05	Run of pit or bank.....	1.4	1.3	1.4	0.6	0.6	0.7
14422 05	Washed, screened, or otherwise prepared.....	3.4	3.3	4.7	5.4	5.5	7.4
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 2.3	¹ 2.2	¹ 3.1	(²)	(²)	(²)
	Pennsylvania:						
1442- --	Construction sand and gravel, total.....	23.0	22.7	32.6	14.8	14.4	20.4
	Construction sand.....	11.6	11.4	16.6	8.1	7.8	11.0
14422 01	Washed, screened, ground, or otherwise prepared.....	11.0	10.8	15.9	7.7	7.5	10.6
	Gravel.....	7.2	7.1	10.4	6.7	6.6	9.3
14422 05	Washed, screened, or otherwise prepared.....	6.5	6.4	9.7	6.4	6.3	9.1
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 4.2	¹ 4.2	¹ 5.5	(²)	(²)	(²)
	EAST NORTH CENTRAL						
1442- --	Construction sand and gravel, total.....	165.8	161.4	160.5	140.1	138.5	131.5
	Construction sand, total.....	48.8	48.0	48.1	59.7	59.2	52.1
14421 01	Run of pit or bank.....	8.2	8.1	7.1	7.7	7.7	5.3
14422 01	Washed, screened, ground, or otherwise prepared.....	40.6	39.8	41.0	52.0	51.6	46.8
	Gravel, total.....	71.0	69.5	75.6	80.4	79.3	79.4
14421 05	Run of pit or bank.....	12.2	12.1	10.3	11.7	11.6	7.8
14422 05	Washed, screened, or otherwise prepared.....	58.8	57.5	65.3	68.7	67.7	71.5
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 46.0	¹ 43.9	¹ 36.8	(²)	(²)	(²)
	Ohio:						
1422- --	Construction sand and gravel, total.....	47.0	45.6	50.0	36.8	36.2	39.8
	Construction sand, total.....	14.9	14.5	16.7	15.7	15.5	15.1
14421 01	Run of pit or bank.....	1.6	1.6	1.7	2.4	2.4	1.3
14422 01	Washed, screened, ground, or otherwise prepared.....	13.3	12.8	15.0	13.3	13.1	13.7
	Gravel, total.....	19.7	19.0	22.9	21.0	20.6	24.7
14421 05	Run of pit or bank.....	2.1	2.1	2.2	2.8	2.8	1.9
14422 05	Washed, screened, or otherwise prepared.....	17.6	16.9	20.8	18.2	17.9	22.8
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 12.4	¹ 12.1	¹ 10.4	(²)	(²)	(²)
	Indiana:						
1442- --	Construction sand and gravel, total.....	22.8	22.5	22.5	22.8	22.8	20.4
	Construction sand.....	8.2	8.2	7.3	10.8	10.9	8.9
14422 01	Washed, screened, ground, or otherwise prepared.....	7.6	7.6	6.9	10.1	10.1	8.4
	Gravel.....	10.9	10.8	12.0	11.9	11.9	11.5
14422 05	Washed, screened, or otherwise prepared.....	9.6	9.6	11.0	10.3	10.3	10.5
14420 00 } 14420 01 }	Construction sand and gravel, n.s.k.....	¹ 3.7	¹ 3.5	¹ 3.2	(²)	(²)	(²)

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	EAST NORTH CENTRAL--Continued						
1442- --	Illinois:						
	Construction sand and gravel, total.....	31.3	30.4	28.0	26.7	26.1	23.2
	Construction sand, total.....	11.0	10.7	10.7	12.5	12.3	10.1
14421 01	Run of pit or bank.....	2.2	2.1	2.1	1.2	1.2	0.7
14422 01	Washed, screened, ground, or otherwise prepared.....	8.8	8.6	8.6	11.4	11.1	9.3
	Gravel, total.....	11.6	11.5	11.1	14.2	13.9	13.2
14421 05	Run of pit or bank.....	2.3	2.2	2.2	1.5	1.5	1.0
14422 05	Washed, screened, or otherwise prepared.....	9.3	9.3	8.9	12.7	12.4	12.1
14420 00	Construction sand and gravel, n.s.k.....	18.7	18.1	16.2	(2)	(2)	(2)
14420 01							
1442- --	Michigan:						
	Construction sand and gravel, total.....	40.0	39.1	36.9	33.2	33.2	30.4
	Construction sand, total.....	9.8	9.8	8.9	14.4	14.4	12.3
14421 01	Run of pit or bank.....	2.3	2.3	1.6	2.2	2.2	1.8
14422 01	Washed, screened, ground, or otherwise prepared.....	7.6	7.5	7.3	12.2	12.2	10.5
	Gravel, total.....	17.2	17.1	17.8	18.8	18.7	18.2
14421 05	Run of pit or bank.....	4.0	3.9	3.0	1.8	1.7	1.5
14422 05	Washed, screened, or otherwise prepared.....	13.2	13.1	14.9	17.1	17.0	16.7
14420 00	Construction sand and gravel, n.s.k.....	13.0	12.2	10.2	(2)	(2)	(2)
14420 01							
1442- --	Wisconsin:						
	Construction sand and gravel, total.....	24.8	23.9	23.0	20.6	20.3	17.6
	Construction sand, total.....	4.9	4.8	4.5	6.2	6.1	5.8
14421 01	Run of pit or bank.....	1.5	1.6	1.2	1.2	1.1	1.0
14422 01	Washed, screened, ground, or otherwise prepared.....	3.4	3.3	3.3	5.1	5.0	4.8
	Gravel, total.....	11.6	11.1	11.8	14.4	14.1	11.8
14421 05	Run of pit or bank.....	2.6	2.5	2.1	4.0	4.0	2.4
14422 05	Washed, screened, or otherwise prepared.....	9.0	8.6	9.7	10.4	10.1	9.4
14420 00	Construction sand and gravel, n.s.k.....	18.3	18.0	16.7	(2)	(2)	(2)
14420 01							
	WEST NORTH CENTRAL						
1442- --	Construction sand and gravel, total.....	69.0	65.8	64.7	69.1	67.7	63.7
	Construction sand, total.....	22.2	21.4	20.9	28.0	27.3	23.6
14421 01	Run of pit or bank.....	4.6	4.3	4.1	2.6	2.9	1.8
14422 01	Washed, screened, ground, or otherwise prepared.....	17.6	17.0	16.7	25.4	24.4	21.8
	Gravel, total.....	22.6	21.6	24.6	41.1	40.4	40.1
14421 05	Run of pit or bank.....	5.8	5.6	4.4	4.8	4.8	3.4
14422 05	Washed, screened, or otherwise prepared.....	16.7	16.0	20.2	36.3	35.6	36.7
14420 00	Construction sand and gravel, n.s.k.....	24.3	22.9	19.2	(2)	(2)	(2)
14420 01							
1442- --	Minnesota:				(NA)	(NA)	(NA)
	Construction sand and gravel, total.....	20.5	19.6	18.5			
	Construction sand.....	6.1	5.7	4.8			
14422 01	Washed, screened, ground, or otherwise prepared.....	5.1	4.7	4.1			
	Gravel, total.....	9.2	8.9	9.0			
14421 05	Run of pit or bank.....	2.2	2.2	1.6			
14422 05	Washed, screened, or otherwise prepared.....	7.0	6.7	7.4			
14420 00	Construction sand and gravel, n.s.k.....	15.2	15.1	14.8			
14420 01							
1442- --	Iowa:				(NA)	(NA)	(NA)
	Construction sand and gravel, total.....	13.3	12.4	13.7			
	Construction sand.....	6.1	5.9	6.3			
14422 01	Washed, screened, ground, or otherwise prepared.....	5.2	5.1	5.5			
	Gravel.....	3.0	2.9	4.3			
14422 05	Washed, screened, or otherwise prepared.....	2.3	2.3	3.7			
14420 00	Construction sand and gravel, n.s.k.....	14.2	13.6	13.2			
14420 01							

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	WEST NORTH CENTRAL--Continued						
	Missouri:						
1422- --	Construction sand and gravel, total.....	8.1	7.5	7.6	(NA)	(NA)	(NA)
14421 01	Construction sand.....	2.3	2.2	2.5			
14422 01	Gravel.....	2.1	1.8	2.4			
14421 05	Construction sand and gravel, n.s.k.....	¹ 3.7	¹ 3.5	¹ 2.8			
14420 00							
14420 01							
1442- --	North Dakota:						
	Construction sand and gravel.....	5.1	5.0	4.9	(NA)	(NA)	(NA)
1442- --	South Dakota:						
	Construction sand and gravel.....	2.7	2.3	2.6	(NA)	(NA)	(NA)
1442- --	Nebraska:						
	Construction sand and gravel, total.....	11.7	11.6	10.1	(NA)	(NA)	(NA)
14421 01	Construction sand.....	2.8	2.8	2.3			
14422 01	Gravel.....	3.9	3.8	4.2			
14421 05	Construction sand and gravel, n.s.k.....	¹ 5.0	¹ 4.9	¹ 3.6			
14420 00							
14420 01							
1442- --	Kansas:						
	Construction sand and gravel, total.....	7.7	7.5	7.1	(NA)	(NA)	(NA)
	Construction sand, total.....	3.9	3.9	3.7			
14421 01	Run of pit or bank.....	1.3	1.3	1.2			
14422 01	Washed, screened, ground, or otherwise prepared.....	2.6	2.6	2.5			
	Gravel.....	1.3	1.3	1.5			
14422 05	Washed, screened, or otherwise prepared.....	1.0	1.0	1.3			
14420 00	Construction sand and gravel, n.s.k.....	¹ 2.5	¹ 2.3	¹ 1.9			
14420 01							
	SOUTH ATLANTIC						
1442- --	Construction sand and gravel, total.....	56.4	54.9	63.8	55.7	54.2	61.4
	Construction sand, total.....	28.0	27.4	27.2	31.9	31.1	32.3
14421 01	Run of pit or bank.....	5.2	5.1	4.4	6.1	6.0	5.5
14422 01	Washed, screened, or otherwise prepared.....	22.8	22.4	22.9	25.8	25.1	26.7
	Gravel, total.....	12.3	12.1	19.9	23.8	23.1	29.1
14421 05	Run of pit or bank.....	3.2	3.2	3.5	4.4	4.1	3.4
14422 05	Washed, screened, or otherwise prepared.....	9.1	8.9	16.5	19.4	19.0	25.7
14420 00	Construction sand and gravel, n.s.k.....	¹ 16.2	¹ 15.4	¹ 16.7	(²)	(²)	(²)
14420 01							
1442- --	Delaware:						
	Construction sand and gravel.....	1.9	1.9	1.6	(NA)	(NA)	(NA)
1442- --	Maryland:						
	Construction sand and gravel, total.....	14.2	13.3	16.5	(NA)	(NA)	(NA)
14421 01	Construction sand.....	5.0	4.8	5.7			
14422 01	Gravel, total.....	3.1	3.0	3.8			
14421 05	Run of pit or bank.....	1.6	1.6	1.5			
14422 05	Washed, screened, or otherwise prepared.....	1.5	1.4	2.4			
14420 00	Construction sand and gravel, n.s.k.....	¹ 6.0	¹ 5.6	¹ 7.1			
14420 01							
1442- --	Virginia:						
	Construction sand and gravel, total.....	9.3	8.8	10.8	(NA)	(NA)	(NA)
14421 01	Construction sand.....	1.7	1.6	2.3			
14422 01	Gravel.....	3.0	2.9	4.9			
14422 05	Washed, screened, or otherwise prepared.....	2.6	2.5	4.3			
14420 00	Construction sand and gravel, n.s.k.....	¹ 4.6	¹ 4.3	¹ 3.7			
14420 01							
1422- --	North Carolina:						
	Construction sand and gravel.....	6.4	6.4	7.6	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963					
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers				
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)			
	SOUTH ATLANTIC--Continued									
1442- --	Georgia: Construction sand and gravel.....	6.2	6.1	6.0	(NA)	(NA)	(NA)			
1442- --	Florida: Construction sand and gravel.....	10.7	10.5	9.9	}	(NA)	(NA)			
14421 01	Construction sand, total.....	8.5	8.4	7.7						
14422 01	Run of pit or bank.....	2.8	2.7	2.3						
14422 01	Washed, screened, ground, or otherwise prepared.....	5.7	5.7	5.4						
	EAST SOUTH CENTRAL									
1442- --	Construction sand and gravel, total.....	30.9	29.8	35.6	26.4	26.0	29.8			
	Construction sand, total.....	9.7	9.5	11.6	13.0	12.8	14.0			
14421 01	Run of pit or bank.....	1.2	1.1	1.2	1.7	1.7	1.6			
14422 01	Washed, screened, ground, or otherwise prepared.....	8.5	8.3	10.3	11.2	11.1	12.4			
	Gravel, total.....	12.7	12.5	14.2	13.4	13.2	15.8			
14421 05	Run of pit or bank.....	3.7	3.6	3.0	2.4	2.5	1.9			
14422 05	Washed, screened, or otherwise prepared.....	9.0	8.9	11.0	11.0	10.7	14.0			
14420 00	Construction sand and gravel, n.s.k.....	18.5	17.8	19.8	(2)	(2)	(2)			
14420 01										
1442- --	Kentucky: Construction sand and gravel, total.....	7.4	7.1	8.2	}	(NA)	(NA)			
14421 01	Construction sand.....	4.1	3.9	4.6						
14422 01										
14421 05	Gravel.....	1.8	1.8	2.2						
14422 05										
14420 00	Construction sand and gravel, n.s.k.....	11.5	11.4	11.4	(NA)	(NA)	(NA)			
14420 01										
1442- --	Tennessee: Construction sand and gravel, total.....	7.7	7.2	10.7	}	(NA)	(NA)			
14421 01	Construction sand.....	2.3	2.2	3.2						
14422 01										
14421 05	Gravel.....	3.0	2.8	3.5						
14422 05										
14420 00	Construction sand and gravel, n.s.k.....	12.4	12.2	14.0	(NA)	(NA)	(NA)			
14420 01										
1442- --	Alabama: Construction sand and gravel, total.....	7.1	6.7	7.2	}	(NA)	(NA)			
14421 01	Construction sand.....	1.7	1.7	1.9						
14422 01										
14421 05	Gravel.....	2.3	2.3	2.4						
14422 05										
14420 00	Construction sand and gravel, n.s.k.....	13.2	12.8	12.9	(NA)	(NA)	(NA)			
14420 01										
1442- --	Mississippi: Construction sand and gravel, total.....	8.7	8.7	9.4	}	(NA)	(NA)			
14421 01	Construction sand.....	1.7	1.6	1.8						
14422 01										
14421 05	Gravel, total.....	5.7	5.7	6.1						
14422 05										
14421 05	Run of pit or bank.....	2.2	2.2	1.6	(NA)	(NA)	(NA)			
14422 05	Washed, screened, or otherwise prepared.....	3.5	3.5	4.5						
14420 00	Construction sand and gravel, n.s.k.....	11.3	11.3	11.5	(NA)	(NA)	(NA)			
14420 01										
	WEST SOUTH CENTRAL									
1442- --	Construction sand and gravel, total.....	65.3	63.6	77.2	55.4	55.0	64.4			
	Construction sand, total.....	21.9	21.1	22.0	27.4	27.0	27.7			
14421 01	Run of pit or bank.....	2.4	2.1	1.5	3.4	3.3	2.5			
14422 01	Washed, screened, ground, or otherwise prepared.....	19.5	19.0	20.5	24.1	23.7	25.2			
	Gravel, total.....	28.5	28.2	41.2	27.9	28.0	36.8			
14421 05	Run of pit or bank.....	2.2	2.2	2.2	3.2	3.5	3.5			
14422 05	Washed, screened, or otherwise prepared.....	26.3	26.0	38.9	24.8	24.5	33.3			
14420 00	Construction sand and gravel, n.s.k.....	114.8	114.3	114.1	(2)	(2)	(2)			
14420 01										

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963--Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production	Shipments including interplant transfers		Production	Shipments including interplant transfers	
			Quantity	Value		Quantity	Value
		(million short tons)	(million short tons)	(million dollars)	(million short tons)	(million short tons)	(million dollars)
WEST SOUTH CENTRAL--Continued							
1442- --	Arkansas:						
	Construction sand and gravel, total.....	8.5	8.1	9.1	(NA)	(NA)	(NA)
14421 01	Construction sand.....	2.5	2.5	2.6			
14422 01	Gravel.....	4.1	4.0	5.2			
14422 05							
14420 00	Construction sand and gravel, n.s.k.....	11.8	11.6	11.3			
14420 01							
1442- --	Louisiana:						
	Construction sand and gravel, total.....	16.0	15.9	21.4	(NA)	(NA)	(NA)
	Construction sand.....	4.4	4.4	5.1			
14422 01	Washed, screened, ground, or otherwise prepared.....	3.7	3.7	4.5			
14422 05	Gravel.....	7.7	7.7	12.7			
14420 00	Construction sand and gravel, n.s.k.....	13.8	13.8	13.6			
14420 01							
1442- --	Oklahoma:						
	Construction sand and gravel.....	3.9	3.6	3.1	(NA)	(NA)	(NA)
14421 01	Construction sand.....	2.1	1.9	1.6			
14422 01							
1442- --	Texas:						
	Construction sand and gravel, total.....	36.9	36.0	43.6	30.3	29.9	35.7
	Construction sand.....	12.9	12.3	12.7	14.5	14.1	14.6
14422 01	Washed, screened, ground, or otherwise prepared.....	11.8	11.4	12.1	12.5	12.2	13.1
	Gravel.....	15.9	15.8	22.5	15.8	15.8	21.0
14422 05	Washed, screened, or otherwise prepared.....	14.9	14.8	21.7	14.3	13.8	18.9
14420 00	Construction sand and gravel, n.s.k.....	18.0	17.9	18.3	(2)	(2)	(2)
14420 01							
MOUNTAIN							
1442- --	Construction sand and gravel, total.....	27.9	24.9	28.4	43.5	41.0	45.0
	Construction sand.....	4.9	4.9	5.7	12.4	11.5	13.4
14422 01	Washed, screened, ground, or otherwise prepared.....	4.6	4.5	5.3	11.6	10.8	12.5
	Gravel, total.....	7.8	7.5	9.5	31.1	29.5	31.6
14421 05	Run of pit or bank.....	1.1	1.2	1.0	2.8	2.7	2.4
14422 05	Washed, screened, or otherwise prepared.....	6.7	6.4	8.5	28.3	26.8	29.2
14420 00	Construction sand and gravel, n.s.k.....	115.2	112.4	113.2	(2)	(2)	(2)
14420 01							
1442- --	Montana:						
	Construction sand and gravel.....	1.7	1.6	1.7	(NA)	(NA)	(NA)
1442- --	Idaho:						
	Construction sand and gravel.....	1.4	1.0	1.6	(NA)	(NA)	(NA)
1442- --	Colorado:						
	Construction sand and gravel, total.....	7.5	7.5	9.1	(NA)	(NA)	(NA)
14421 01	Construction sand.....	2.3	2.2	2.2			
14422 01	Gravel.....	3.2	3.2	4.8			
14422 05							
14421 00	Construction sand and gravel, n.s.k.....	12.0	11.9	12.1			
14420 01							
1442- --	New Mexico:						
	Construction sand and gravel.....	2.1	1.9	2.4	(NA)	(NA)	(NA)
1442- --	Arizona:						
	Construction sand and gravel.....	8.2	6.6	7.4	(NA)	(NA)	(NA)
1442- --	Utah:						
	Construction sand and gravel.....	3.2	2.8	2.3	(NA)	(NA)	(NA)
1442- --	Nevada:						
	Construction sand and gravel.....	3.2	3.1	3.4	(NA)	(NA)	(NA)
PACIFIC							
1442- --	Construction sand and gravel, total.....	99.8	96.9	108.8	126.6	121.2	135.6
	Construction sand, total.....	32.7	32.5	35.4	50.1	47.9	50.2
14421 01	Run of pit or bank.....	3.9	3.8	3.8	5.3	4.8	5.0
14422 01	Washed, screened, ground, or otherwise prepared.....	28.9	28.7	31.6	44.8	43.2	45.1

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	PACIFIC--Continued						
1442- --	Construction sand and gravel, total--Continued						
	Gravel, total.....	46.6	46.6	51.7	76.5	73.3	85.4
14421 05	Run of pit or bank.....	4.0	4.0	3.8	8.6	8.0	8.2
14422 05	Washed, screened, or otherwise prepared.....	42.6	42.7	48.0	67.9	65.3	77.2
14420 00	Construction sand and gravel, n.s.k.....	120.5	117.8	121.7	(2)	(2)	(2)
14420 01							
	Washington:						
1442- --	Construction sand and gravel, total.....	16.0	15.8	17.2	(NA)	(NA)	(NA)
	Construction sand.....	4.0	4.0	4.2			
14422 01	Washed, screened, ground, or otherwise prepared.....	3.1	3.1	3.4			
	Gravel.....	7.6	7.6	7.7			
14422 05	Washed, screened, or otherwise prepared.....	6.4	6.4	6.8			
14420 00	Construction sand and gravel, n.s.k.....	14.4	14.2	15.3	(2)	(2)	(2)
14420 01							
	California:						
1442- --	Construction sand and gravel, total.....	72.3	70.5	77.5	100.8	97.3	107.5
	Construction sand, total.....	26.6	26.4	28.0	42.4	40.9	42.3
14421 01	Run of pit or bank.....	2.0	2.0	1.7	4.3	3.8	3.9
14422 01	Washed, screened, ground, or otherwise prepared.....	24.5	24.4	26.3	38.2	37.1	38.4
	Gravel, total.....	34.2	34.3	37.9	58.3	56.4	65.2
14421 05	Run of pit or bank.....	2.2	2.2	2.1	5.8	5.6	5.7
14422 05	Washed, screened, or otherwise prepared.....	32.0	32.1	35.8	52.5	50.9	59.4
14420 00	Construction sand and gravel, n.s.k.....	111.5	119.8	111.7	(2)	(2)	(2)
14420 01							
	UNITED STATES						
	Industrial sand, total.....	24.8	24.6	90.7	21.4	21.4	70.9
14430 01	Glass sand.....	9.5	9.5	34.0	8.1	8.1	27.2
14440 01	Molding sand.....	8.5	8.4	27.8	7.8	7.8	21.0
14450 01	Industrial sand, n.e.c.....	6.8	6.6	29.0	5.5	5.5	22.7
	NEW ENGLAND						
	Industrial sand.....	0.2	0.2	1.4	0.2	0.2	0.9
	MIDDLE ATLANTIC						
	Industrial sand.....	4.7	4.7	18.1	4.5	4.5	16.9
14440 01	Molding sand.....	1.6	1.6	6.2	1.9	1.9	6.6
	EAST NORTH CENTRAL						
	Industrial sand, total.....	10.1	10.1	32.7	8.6	8.7	23.9
14430 01	Glass sand.....	3.2	3.2	9.3	2.5	2.5	7.1
14440 01	Molding sand.....	5.3	5.3	16.5	4.7	4.7	10.7
14450 01	Industrial sand, n.e.c.....	1.5	1.5	6.9	1.5	1.5	6.1
	Ohio:						
	Industrial sand.....	1.5	1.4	5.9	1.1	1.1	4.4
14440 01	Molding sand.....	0.7	0.7	2.7	(NA)	(NA)	(NA)
	Illinois:						
	Industrial sand.....	4.0	4.0	15.0	2.9	2.9	10.2
14440 01	Molding sand.....	1.1	1.1	5.3	(NA)	(NA)	(NA)
	Michigan:						
	Industrial sand.....	3.1	3.1	7.9	3.2	3.2	6.3
	WEST NORTH CENTRAL						
	Industrial sand, total.....	1.5	1.4	5.1	1.6	1.6	4.8
14430 01	Glass sand.....	0.7	0.7	1.7	(NA)	(NA)	(NA)
14440 01	Molding sand.....	0.3	0.3	0.9	(NA)	(NA)	(NA)
14450 01	Industrial sand, n.e.c.....	0.5	0.4	2.5	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million short tons)	Shipments including interplant transfers		Production (million short tons)	Shipments including interplant transfers	
			Quantity (million short tons)	Value (million dollars)		Quantity (million short tons)	Value (million dollars)
	SOUTH ATLANTIC						
14430 01	Industrial sand, total.....	2.7	2.7	11.6	2.3	2.3	9.0
14440 01	Glass sand.....	1.6	1.5	6.3	(NA)	(NA)	(NA)
14450 01	Molding sand.....	0.2	0.2	0.6	(NA)	(NA)	(NA)
	Industrial sand, n.e.c.....	1.0	1.0	4.7	(NA)	(NA)	(NA)
	Maryland:						
	Industrial sand.....	0.4	0.3	1.2	(NA)	(NA)	(NA)
	EAST SOUTH CENTRAL						
	Industrial sand.....	1.1	1.1	3.4	0.9	0.9	2.3
	WEST SOUTH CENTRAL						
14430 01	Industrial sand, total.....	2.3	2.3	9.0	1.6	1.6	5.8
14440 01	Glass sand.....	0.6	0.6	1.8	(NA)	(NA)	(NA)
14450 01	Molding sand.....	0.4	0.4	1.1	(NA)	(NA)	(NA)
	Industrial sand, n.e.c.....	1.4	1.4	6.0	(NA)	(NA)	(NA)
	Texas:						
	Industrial sand.....	1.0	1.0	4.2	0.5	0.5	1.9
	MOUNTAIN						
	Industrial sand.....	0.4	0.5	1.7	0.3	0.3	1.3
	PACIFIC						
14430 01	Industrial sand.....	1.6	1.6	7.9	1.4	1.4	5.9
	Glass sand.....	1.1	1.1	5.3	(NA)	(NA)	(NA)

Note: Detail may not add to total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.

¹Figures include construction sand and gravel for establishments which did not report detailed products. Also included are estimates for administrative records (establishments with less than 5 employees) which accounted for approximately 5 percent of the United States total.

²Sand and gravel, n.s.k., which accounted for approximately 10 percent of the United States total, were allocated to reported product categories in 1963.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL				
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	182.3	(X)	175.9
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	159.9	(X)	150.2
144191	Sand and gravel received for preparation.....	Million short tons.....	12.7	9.7	(NA)	3.1	
353011	Purchased machinery installed.....	.....	(X)	53.9	(X)	52.8
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	.....	(NA)	1.0	}	(X)
289212	Ammonium nitrate.....	1,000 pounds....	2,080.7	0.1			
289214	Blasting accessories.....	.....	(X)	0.1		
331201	Steel mill shapes and forms.....	1,000 short tons.....	(NA)	5.5			
300167	Rubber and plastic products, including tires and tubes.....	.....	(X)	2.3		
970099	All other supplies.....	.....	(X)	54.7		
974000	Undistributed supplies ¹.....	.....	(X)	32.6		
	Fuels used, total.....	.....	(X)	22.4	(X)	25.8
121005	Coal.....	1,000 short tons.....	42.0	0.1	74.0	}	
291141	Fuel oil:				1,206.0		
	Distillate.....	1,000 barrels...	1,431.4	6.3			
291151	Residual.....	...do.....	179.0	0.8			
131300	Gas.....	Million cubic feet.....	156.1	0.4	496.0		
291111	Gasoline.....	1,000 gallons...	24,408.0	6.2	24,337.0	(X)	
960018	Other fuels.....	.....	(X)	0.9	(X)	
977000	Undistributed fuels ¹.....	.....	(X)	7.7	(X)	
	NEW ENGLAND DIVISION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	7.6	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	6.4	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	2.3	1.1	(NA)	(NA)	
353011	Purchased machinery installed.....	.....	(X)	1.4	(X)	(NA)
	Fuels used, total.....	.....	(X)	1.2	(X)	(NA)
	MIDDLE ATLANTIC DIVISION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	20.4	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	18.3	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	3.2	2.7	(NA)	(NA)	
353011	Purchased machinery installed.....	.....	(X)	5.8	(X)	(NA)
	Fuels used, total.....	.....	(X)	2.1	(X)	(NA)
	Fuel oil:						
291141	Distillate.....	1,000 barrels...	176.7	0.7	(X)	(NA)	
291151	Residual.....	...do.....					

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL--Con.				
	<u>Geographic Area--Continued</u>						
	MIDDLE ATLANTIC DIVISION--Continued						
	NEW JERSEY						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	4.7	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	4.3	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	1.1	1.0	(NA)	(NA)	
353011	Purchased machinery installed.....	.....	(X)	1.5	(X)	(NA)
	Fuels used, total.....	.....	(X)	0.4	(X)	(NA)
	EAST NORTH CENTRAL DIVISION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	41.5	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	36.0	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	1.2	0.8	(NA)	(NA)	
353011	Purchased machinery installed.....	.....	(X)	13.0	(X)	(NA)
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	}	0.5	(NA)	(NA)	
289212	Ammonium nitrate.....	..do.....					
289214	Blasting accessories.....	..do.....					
331201	Steel mill shapes and forms.....	.....				
300167	Rubber and plastic products, including tires and tubes.....	.....				
970099	All other supplies.....	.....	(X)	11.7		
974000	Undistributed supplies ¹.....	.....	(X)	9.1		
	Fuels used, total.....	.....	(X)	5.5	(X)	(NA)
	Fuel oil:						
291141	Distillate.....	1,000 barrels...	}	302.1	1.6	(X)	(NA)
291151	Residual.....	..do.....					
291111	Gasoline.....	1,000 gallons...	(NA)	1.3	(X)	(NA)	
960018	Other fuels.....	.....	}	2.6	(X)	(NA)
977000	Undistributed fuels ¹.....	.....				
	OHIO						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	11.5	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	9.9	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	3.0	(X)	(NA)
	Fuels used, total.....	.....	(X)	1.6	(X)	(NA)
	ILLINOIS						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	8.2	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	7.3	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	3.2	(X)	(NA)
	Fuels used, total.....	.....	(X)	0.9	(X)	(NA)
	MICHIGAN						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	9.3	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	8.1	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	2.0	(X)	(NA)
	Fuels used, total.....	.....	(X)	1.2	(X)	(NA)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL--Con.			
	<u>Geographic Area--Continued</u>					
	WEST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	20.2	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	16.5	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	1.2	0.9	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	5.5	(X)	(NA)
	Fuels used, total.....		(X)	3.7	(X)	(NA)
	Fuel oil:					
291141	Distillate.....	1,000 barrels...do.....	187.3	0.8	(X)	(NA)
291151	Residual.....					
291111	Gasoline.....	1,000 gallons...	(NA)	1.5	(NA)	(NA)
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	18.0	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	16.0	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	1.4	0.8	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	5.2	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....		(NA)	1.4	(NA)	(NA)
	Fuels used, total.....		(X)	2.0	(X)	(NA)
	Fuel oil:					
291141	Distillate.....	1,000 barrels...do.....	127.0	0.6	(X)	(NA)
291151	Residual.....					
291111	Gasoline.....	1,000 gallons...	(NA)	0.5	(NA)	(NA)
	EAST SOUTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	10.5	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	8.7	(X)	(NA)
353011	Purchased machinery installed.....		(X)	3.1	(X)	(NA)
331201	Steel mill shapes and forms.....		(NA)	0.5	(NA)	(NA)
	Fuels used, total.....		(X)	1.8	(X)	(NA)
	Fuel oil:					
291141	Distillate.....	1,000 barrels...do.....	191.5	0.7	(X)	(NA)
291151	Residual.....					
291111	Gasoline.....	1,000 gallons...	(NA)	0.6	(NA)	(NA)
	WEST SOUTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	29.8	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	27.1	(X)	(NA)
353011	Purchased machinery installed.....		(X)	10.5	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....		(NA)	1.1	(NA)	(NA)
	Fuels used, total.....		(X)	2.7	(X)	(NA)
	Fuel oil:					
291141	Distillate.....	1,000 barrels...do.....	247.5	1.2	(NA)	(NA)
291151	Residual.....					
291111	Gasoline.....	1,000 gallons...	(NA)	0.7	(NA)	(NA)

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL--Con.			
	<u>Geographic Area--Continued</u>					
	WEST SOUTH CENTRAL DIVISION--Continued					
	TEXAS					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....	.....	(X)	19.9	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	18.5	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	7.5	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....	.....	(NA)	0.7	(NA)	(NA)
	Fuels used, total.....	.....	(X)	1.4	(X)	(NA)
	MOUNTAIN DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	5.7	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	4.6	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	1.1	(X)	(NA)
	Fuels used, total.....	.....	(X)	1.1	(X)	(NA)
	PACIFIC DIVISION					
	Selected supplies minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	28.7	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	26.3	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	1.8	1.6	(NA)	(NA)
353011	Purchased machinery installed.....	.....	(X)	8.2	(X)	(NA)
	Supplies used:					
331201	Steel mill shapes and forms.....	.....	(NA)	0.8	(NA)	(NA)
	Fuels used, total.....	.....	(X)	2.4	(X)	(NA)
	Fuel oil:					
291141	Distillate.....	1,000 barrels..	155.2	0.8	(NA)	(NA)
291151	Residual.....	do.....				
291111	Gasoline.....	1,000 gallons..	(NA)	0.6	(NA)	(NA)
	<u>Type of Operation</u>					
	Mining only:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	7.7	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	6.4	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	3.1	(X)	(NA)
	Fuels used, total.....	.....	(X)	1.2	(X)	(NA)
	Mining with preparation:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	143.9	(X)	(NA)
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....	.....	(X)	127.0	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	9.1	6.9	(X)	(NA)
353011	Purchased machinery installed.....	.....	(X)	49.9		

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1442.--CONSTRUCTION SAND AND GRAVEL--Con.				
	<u>Type of Operation--Continued</u>						
289211	Supplies used:						
289212	Explosive materials, except ammonium nitrate.....	1,000 pounds....	}	(X)	0.8	(X)	
289214	Ammonium nitrate.....	...do.....					
331201	Blasting accessories.....	.....				
300167	Steel mill shapes and forms.....	.....				
970099	Rubber and plastic products, including tires and tubes....	.....				
	All other supplies.....	.....		(X)	50.3	(NA)
974000	Undistributed supplies ¹.....	.....	(X)	11.3		
	Fuels used, total.....	.....	(X)	16.8	(X)	(NA)
291141	Fuel oil:						
291151	Distillate.....	1,000 barrels...	1,323.1	5.9	}	(X)	
	Residual.....	...do.....	147.3	0.7			
131300	Gas.....	Million cubic feet.....	155.8	0.3			
291111	Gasoline.....	1,000 gallons...	(NA)	5.8			
960018	Other fuels.....	.....	(X)	0.8		
977000	Undistributed fuels ¹.....	.....	(X)	3.3		
	Bank, wet pit, and dry pit mining with preparation:						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	118.3	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	104.9	(X)	(NA)
144191	Sand and gravel received for preparation.....	Million short tons.....	8.0	6.1	}	(X)	
353011	Purchased machinery installed.....	.....	(X)	39.6		
289211	Supplies used:						
289212	Explosive materials, except ammonium nitrate.....	1,000 pounds....	}	(X)	0.8	(X)	
289214	Ammonium nitrate.....	...do.....					
331201	Blasting accessories.....	.....				
300167	Steel mill shapes and forms.....	.....				
970099	Rubber and plastic products, including tires and tubes....	.....				
	All other supplies.....	.....		(X)	41.8	(NA)
974000	Undistributed supplies ¹.....	.....	(X)	10.4		
	Fuels used, total.....	.....	(X)	13.4	(X)	(NA)
291141	Fuel oil:						
291151	Distillate.....	1,000 barrels...	}	1,227.3	5.4	(X)	
	Residual.....	...do.....					
291111	Gasoline.....	1,000 gallons...	(NA)	4.6			
960018	Other fuels.....	.....	(X)	0.6		
977000	Undistributed fuels ¹.....	.....	(X)	2.8		
INDUSTRY 1446.--INDUSTRIAL SAND							
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....	.....	(X)	26.6	(X)	18.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	21.8	(X)	15.4
144191	Sand and gravel received for preparation.....	Million short tons.....	1.2	1.2	(NA)	0.7	
353011	Purchased machinery installed.....	.....	(X)	8.1	(X)	5.2

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>Geographic Area--Continued</u>		INDUSTRY 1446.--INDUSTRIAL SAND--Continued			
	UNITED STATES--Continued					
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	1,531.9	0.2	(X)	9.5
289212	Ammonium nitrate.....	...do.....	3,950.3	0.2		
289214	Blasting accessories.....	.....	(X)	(Z)		
331201	Steel mill shapes and forms.....	.....	(NA)	0.8		
300167	Rubber and plastic products, including tires and tubes.....	.....	(X)	0.2		
970099	All other supplies.....	.....	(X)	9.2		
974000	Undistributed supplies ¹.....	.....	(X)	1.9		
	Fuels used, total.....	.....	(X)	4.8	(X)	3.5
121005	Coal.....	1,000 short tons.....	122.5	0.7	83.0	3.5
	Fuel oil:					
291141	Distillate.....	1,000 barrels..	208.0	1.0	273.0	
291151	Residual.....	...do.....				
131300	Gas.....	Million cubic feet.....	8,927.5	1.9	2,462.0	
291111	Gasoline.....	1,000 gallons..	1,569.0	0.4	1,406.0	
960018	Other fuels.....	.....	(X)	0.5	(X)	
977000	Undistributed fuels ¹.....	.....	(X)	0.3	(X)	

(Z) Less than \$50 thousand. (X) Not applicable. (NA) Not available.

¹This item represents the total cost of supplies or fuels used for establishments that did not report detailed data. For 1967, this also includes estimates for establishments that were not mailed report forms.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



MIC67(1)-14C

INDUSTRY SERIES

CLAY, CERAMIC, AND REFRACTORY MINERALS

SIC code	Industry
1452	Bentonite
1453	Fire clay
1454	Fuller's earth
1455	Kaolin and ball clay
1456	Feldspar
1459	Clay and related minerals, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	4
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	8
2B General Statistics for Manufacturing Establishments With Mining Operations, by Geographic Area: 1967 and 1963	10
3B Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967. . .	11
4 General Statistics, by Employment Size of Establishment: 1967	14
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	15
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	16
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	19
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

CLAY, CERAMIC, AND REFRACTORY MINERALS

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 145, Clay, Ceramic, and Refractory Minerals. Mines operated in conjunction with cement, brick, other structural clay products, and pottery and related products plants are included in these industries when separate reports are available. Establishments primarily engaged in grinding, pulverizing, or otherwise treating clay and ceramic and refractory minerals not in conjunction with mining operations are classified in industry 3295, Minerals, Ground or Treated. The separate industries included in this group are as follows:

SIC Code and Title

1452--Bentonite
1453--Fire Clay
1454--Fuller's Earth
1455--Kaolin and Ball Clay
1456--Feldspar
1459--Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1452--Bentonite. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing bentonite. Establishments engaged in preparing bentonite which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

Industry 1453--Fire Clay. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fire clay, including stoneware clay and diaspore. Establishments producing fire clay as a principal product in conjunction with the manufacture of cement or clay refractory or pottery products are classified in Major Group 32, Stone, Clay, Glass, and Concrete Products.

Industry 1454--Fuller's Earth. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fuller's earth.

Industry 1455--Kaolin and Ball Clay. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

Industry 1456--Feldspar. This industry represents establishments primarily engaged in mining, milling, grinding or otherwise preparing feldspar. Establishments engaged in grinding feldspar which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

Industry 1459--Clay and Related Minerals, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic, or refractory minerals, not elsewhere classified, such as common clay

and shale, andalusite, aplite, brucite, dumortierite, kyanite, laterite, magnesite, olivine, pinite, sillimanite, and topaz (nongem). Establishments producing common clay and shale in conjunction with the manufacture of structural clay products are classified in Major Group 32, Stone, Clay, Glass, and Concrete Products. In 1967 such combination mining and manufacturing establishments were industries: 3241, Cement, Hydraulic; 3251, Brick and Structural Clay Tile; 3253, Ceramic Wall and Floor Tile; and 3259, Structural Clay Products, N.E.C.

Selected statistics for fire clay and common clay and shale mines included in manufacturing establishments are shown in tables 1, 2, and 6A of this report.

SUMMARY OF FINDINGS

The total value of shipments and receipts of the clay and related minerals industries in 1967 was \$218.3 million. Of the total value of shipments for this group, the Bentonite Industry accounted for \$21.2 million; the Fire Clay Industry, \$23.1 million; the Fuller's Earth Industry, \$22.5 million; the Kaolin and Ball Clay Industry, \$87.9 million; the Feldspar Industry, \$9.4 million; and the Clay and Related Minerals, N.E.C., Industry \$54.1 million. These figures represent gross value of shipments and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for preparation. However, for the group as a whole, the cost of minerals received for preparation from other establishments amounted to only \$0.7 million, or less than one percent of the total value of shipments and receipts of all industries in this group. For the Fuller's Earth Industry, no receipts of minerals for preparation were reported. For all other industries in this group the cost of minerals received for preparation amounted to less than one percent of the industry total value of shipments and receipts.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced in the industry and as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Clay, Ceramic, and Refractory Minerals Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used. Both Census and Mines figures for fire clay and common clay and shale include production for use at the same establishment in manufacturing cement, clay products, and pottery products.
2. The Bureau of the Census excludes single unit establishments with no paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such small operations is usually very small.

3. Differences exist in coverage in certain areas for both collecting agencies.

4. In some cases, a respondent may report his product as one type of clay to the Bureau of the Census and as another type of clay to the Bureau of Mines. This accounts for some of the differences between Census and Bureau of Mines figures for bentonite and fuller's earth.

5. Census figures are sometimes reported at a different level of preparation than the Bureau of Mines figures. In general, Census uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as drying and pulverizing.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Pro- duction	Shipments including interplant transfers		Pro- duction	Shipments	
		Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
Bentonite:						
Crude bentonite.....	¹ 2,207.7	² 362.6	² 1.7	(NA)	(NA)	(NA)
Net shipments by the mineral industries....	(X)	1,973.9	20.1	³ 2,042.0	(NA)	³ 20.5
Fire clay:						
Crude fire clay.....	⁴ 4,251.0	2,097.2	16.2	} ³ 7,972.4	(NA)	³ 42.2
Prepared fire clay.....	(NA)	826.7	6.0			
Fuller's earth:						
Net shipments.....	(X)	761.2	19.7	³ 803.9	(NA)	³ 20.5
Kaolin and ball clay:						
Crude kaolin and ball clay.....	¹ 6,277.6	² 415.3	² 3.1	} ³ 4,532.0	(NA)	³ 88.8
Prepared kaolin and ball clay.....	(NA)	4,087.2	85.6			
Feldspar:						
Crude feldspar.....	1,190.6	34.6	0.2	³ 689.2	(NA)	³ 7.1
Prepared feldspar.....	(NA)	635.2	8.8	(NA)	663.2	8.8
Common clay and shale:						
Crude common clay and shale.....	⁴ 30,701.0	1,600.7	2.9	} ³ 39,312.0	(NA)	³ 52.0
Prepared common clay and shale.....	(NA)	6,436.8	33.2			
Other clay, ceramic, and refractory minerals:						
Crude.....	(NA)	206.6	1.5	(NA)	(NA)	(NA)
Prepared.....	(NA)	1,119.3	17.6	(NA)	(NA)	(NA)

(NA) Not available. (X) Not applicable.

¹Represents quantity mined and prepared at same establishments plus quantity of crude net shipments.

²Represents net shipments.

³Represents sold or used by producers.

⁴Represents quantity mined and used at the same establishment in making cement, clay products, and prepared clay plus quantity of crude clay shipped.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)
GROUP 145.--CLAY AND RELATED MINERALS, N.E.C., AND SIMILAR MINES IN MANUFACTURES								
1967, total ²	(NA)	735	134	10.6	63.8	8.9	19.1	49.0
Mines and plants in mineral industries ²	(NA)	356	121	9.3	57.7	7.5	16.5	42.9
Mines in manufacturing establishments.....	(NA)	379	3	³ 1.4	³ 6.0	³ 1.4	2.6	6.0
1963, total.....	825	1,080	136	11.4	55.9	10.3	21.3	47.9
Mines and plants in mineral industries.....	349	423	111	8.3	42.2	7.1	15.1	34.1
Mines in manufacturing establishments.....	496	657	25	³ 3.1	³ 13.7	³ 3.1	6.2	13.7
1958, total.....	888	1,202	129	11.3	46.8	9.9	20.0	37.6
Mines and plants in mineral industries.....	² 396	490	112	8.8	36.2	7.3	14.9	26.9
Mines in manufacturing establishments.....	520	712	17	³ 2.6	³ 10.7	³ 2.6	5.1	10.7
1954, total.....	(NA)	1,363	(NA)	12.1	38.7	11.3	23.0	34.7
Mines and plants in mineral industries.....	475	632	111	8.2	26.5	7.5	15.4	22.5
Mines in manufacturing establishments.....	(NA)	731	(NA)	³ 3.8	³ 12.2	³ 3.8	7.7	12.2
1939, total.....	890	⁶ 1,132	(NA)	12.3	11.3	11.5	20.5	9.5
Mines and plants in mineral industries.....	(NA)	⁶ 454	(NA)	7.9	7.0	7.2	(NA)	5.4
Mines in manufacturing establishments.....	² 556	⁶ 678	(NA)	4.4	4.3	4.2	(NA)	4.1
Mines and plants classified in mineral industries:								
1929.....	(NA)	277	(NA)	6.7	7.0	6.1	(NA)	5.6
1919.....	(NA)	395	(NA)	7.6	7.9	7.1	(NA)	6.8
1909 ⁸	² 313	313	(NA)	4.2	1.9	3.9	(NA)	1.6
1902.....	² 234	⁶ 236	(NA)	3.0	1.3	² 2.8	(NA)	1.1
INDUSTRY 1452.--BENTONITE								
1967 ²	(NA)	32	16	0.9	5.4	0.6	1.4	3.4
1963.....	31	44	16	0.8	4.1	0.6	1.5	3.1
1958.....	29	41	15	0.7	2.9	0.5	1.1	2.0
1954.....	29	43	16	0.6	2.1	0.6	1.3	1.9
1939 ¹¹	27	⁶ 29	(NA)	0.4	0.4	0.4	0.7	0.3
INDUSTRY 1453.--FIRE CLAY AND FIRE CLAY MINES IN MANUFACTURES								
1967, total ²	(NA)	134	13	1.0	6.3	0.9	1.8	5.4
Fire clay industry ²	(NA)	99	12	0.8	5.1	0.7	1.4	4.2
Fire clay mines in manufactures.....	(NA)	35	1	³ 0.2	³ 1.1	³ 0.2	0.4	1.1
1963, total.....	228	293	29	2.2	10.2	2.1	4.0	9.4
Fire clay industry.....	134	155	14	1.0	4.6	0.9	1.6	3.8
Fire clay mines in manufactures.....	101	138	15	³ 1.2	³ 5.6	³ 1.2	2.4	5.6
1958, total.....	235	317	28	2.3	9.6	2.1	3.8	8.6
Fire clay industry.....	136	182	19	1.5	6.0	1.3	2.2	5.0
Fire clay mines in manufactures ¹²	104	135	9	³ 0.8	³ 3.6	³ 0.8	1.6	3.6
1954, total.....	279	353	(NA)	3.2	10.7	3.0	5.5	9.8
Fire clay industry.....	180	248	29	2.0	6.6	1.8	3.1	5.7
Fire clay mines in manufactures.....	(NA)	⁶ 105	(NA)	³ 1.2	³ 4.1	³ 1.2	2.4	4.1
1939, total ¹³	200	⁶ 306	(NA)	3.9	3.9	3.7	5.6	3.4
Fire clay industry.....	(NA)	⁶ 196	(NA)	2.3	2.1	2.1	(NA)	1.8
Fire clay mines in manufactures.....	75	110	(NA)	1.6	1.7	1.5	(NA)	1.5
INDUSTRY 1454.--FULLER'S EARTH								
1967 ²	(NA)	16	11	1.1	5.1	1.0	2.0	4.1
1963.....	15	15	9	0.8	3.1	0.7	1.4	2.4
1958.....	13	14	6	0.7	2.4	0.5	1.1	1.7
1954.....	15	16	6	0.6	1.7	0.5	1.1	1.4
1939.....	21	⁶ 22	(NA)	0.7	0.7	0.6	1.1	0.4
1929.....	(NA)	22	(NA)	1.1	1.2	1.0	(NA)	0.9
1919.....	(NA)	9	(NA)	0.9	0.6	0.8	(NA)	0.5
1909.....	16	16	(NA)	0.4	0.2	0.3	(NA)	0.1
1902.....	4	⁶ 4	(NA)	0.1	(Z)	² 0.1	(NA)	(Z)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels purchased electric energy and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars) ¹	Quantity of primary products (1,000 short tons)	Capital expenditures (million dollars)
GROUP 145.--CLAY AND RELATED MINERALS, N.E.C., AND SIMILAR MINES IN MANUFACTURES--Continued							
1967, total ²	183.1	74.9	(NA)	254.9	244.2	40,489.8	(NA)
Mines and plants in mineral industries ²	154.7	66.8	20.9	218.3	207.6	18,657.8	24.0
Mines in manufacturing establishments.....	28.4	8.2	(NA)	⁴ 36.6	⁴ 36.6	21,832.0	(NA)
1963, total.....	160.0	64.9	(NA)	221.4	218.9	50,541.0	(NA)
Mines and plants in mineral industries.....	113.6	51.6	11.1	161.6	159.2	16,458.0	14.6
Mines in manufacturing establishments.....	46.4	13.4	(NA)	⁴ 59.8	⁴ 59.8	34,083.0	(NA)
1958, total.....	129.0	48.5	(NA)	173.6	172.6	43,513.0	(NA)
Mines and plants in mineral industries.....	87.4	39.2	9.3	122.7	121.7	13,834.0	13.2
Mines in manufacturing establishments.....	41.6	9.3	(NA)	⁴ 50.9	⁴ 50.9	29,679.0	(NA)
1954, total.....	106.1	36.9	(NA)	140.4	139.1	43,290.0	(NA)
Mines and plants in mineral industries.....	78.4	27.9	6.5	103.8	102.5	13,143.0	9.1
Mines in manufacturing establishments.....	27.7	9.0	(NA)	⁴ 36.7	⁴ 36.7	30,147.0	(NA)
1939, total.....	21.7	⁷ 5.6	(NA)	(NA)	27.4	21,984.0	(NA)
Mines and plants in mineral industries.....	14.4	⁷ 4.0	(NA)	(NA)	18.4	(NA)	(NA)
Mines in manufacturing establishments.....	7.3	⁷ 1.7	(NA)	(NA)	9.0	(NA)	(NA)
Mines and plants classified in mineral industries:							
1929.....	15.1	⁷ 4.4	0.6	(NA)	19.5	5,008.0	(NA)
1919.....	11.4	3.5	(NA)	14.8	14.8	(NA)	(NA)
1909 ⁸	3.0	0.6	(NA)	3.6	3.6	(NA)	(NA)
1902.....	2.1	⁷ 0.4	(NA)	(NA)	2.4	1,467.0	(NA)
INDUSTRY 1452.--BENTONITE--Continued							
1967 ²	13.2	8.2	0.6	21.2	(D)	1,951.8	0.9
1963.....	11.4	6.9	1.1	18.1	(D)	1,629.0	1.4
1958.....	12.2	4.7	1.0	16.8	(D)	¹⁰ 1,558.0	1.1
1954.....	16.4	5.5	0.6	21.8	(D)	1,472.0	0.6
1939 ¹¹	1.5	⁷ 0.5	(NA)	(NA)	2.0	223.0	(NA)
INDUSTRY 1453.--FIRE CLAY AND FIRE CLAY MINES IN MANUFACTURES--Continued							
1967, total ²	25.6	7.6	(NA)	32.5	31.7	4,278.0	(NA)
Fire clay industry ²	18.5	5.4	0.8	23.1	22.2	2,886.0	1.5
Fire clay mines in manufactures.....	7.1	2.3	(NA)	⁴ 9.4	⁴ 9.4	1,392.0	(NA)
1963, total.....	30.6	10.1	(NA)	40.5	40.3	8,245.0	(NA)
Fire clay industry.....	12.6	4.6	2.0	17.1	16.9	3,552.0	2.2
Fire clay mines in manufactures.....	18.0	5.5	(NA)	⁴ 23.4	⁴ 23.4	4,693.0	(NA)
1958, total.....	25.8	7.5	(NA)	32.9	32.8	8,447.0	(NA)
Fire clay industry.....	14.5	4.5	1.7	18.6	18.4	4,000.0	2.1
Fire clay mines in manufactures ¹²	11.3	3.0	(NA)	⁴ 14.3	⁴ 14.3	4,447.0	(NA)
1954, total.....	24.3	7.5	(NA)	31.8	31.7	8,447.0	(NA)
Fire clay industry.....	17.5	4.8	1.3	22.2	22.0	4,405.0	1.3
Fire clay mines in manufactures.....	6.9	2.7	(NA)	⁴ 9.6	⁴ 9.6	3,989.0	(NA)
1939, total ¹³	6.2	⁷ 1.0	(NA)	(NA)	7.2	4,101.0	(NA)
Fire clay industry.....	3.4	⁷ 0.7	(NA)	(NA)	4.1	(NA)	(NA)
Fire clay mines in manufactures.....	2.8	⁷ 0.3	(NA)	(NA)	3.1	(NA)	(NA)
INDUSTRY 1454.--FULLER'S EARTH--Continued							
1967 ²	15.6	6.5	4.5	22.5	(D)	761.2	4.1
1963.....	9.1	4.3	0.8	13.0	(D)	462.0	1.2
1958.....	6.0	3.1	0.3	8.7	(D)	285.0	0.6
1954.....	4.2	1.8	0.5	6.0	6.0	306.0	0.5
1939.....	1.4	⁷ 0.7	(NA)	(NA)	2.1	187.0	(NA)
1929.....	3.6	⁷ 1.2	0.1	(NA)	4.8	370.0	(NA)
1919.....	1.4	0.6	(NA)	2.0	2.0	(NA)	(NA)
1909.....	0.2	0.1	(NA)	0.3	0.3	(NA)	(NA)
1902.....	0.1	(Z)	(NA)	(NA)	0.1	11.0	(NA)

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)
INDUSTRY 1455.--KAOLIN AND BALL CLAY								
1967 ²	(NA)	63	34	3.7	24.1	2.9	6.4	16.7
1963.....	39	48	28	3.3	17.7	2.9	6.1	14.5
1958.....	41	53	26	3.4	14.0	2.7	5.7	9.7
1954 ¹⁴	40	54	28	3.1	9.9	2.8	6.2	8.1
1939 ^{11 14}	75	⁶ 95	(NA)	3.4	2.5	3.2	6.0	1.8
1889.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1880.....	(NA)	⁶ 9	(NA)	0.3	0.1	(NA)	(NA)	(NA)
INDUSTRY 1456.--FELDSPAR								
1967 ²	(NA)	17	9	0.5	2.6	0.4	0.9	2.0
1963.....	24	31	10	0.5	2.6	0.4	0.9	1.7
1958.....	64	74	10	0.6	1.9	0.5	1.0	1.5
1954.....	58	84	10	0.6	1.7	0.6	1.2	1.5
1939 ¹³	47	⁶ 59	(NA)	0.6	0.5	0.5	1.0	0.4
1929 ¹³	(NA)	51	(NA)	0.7	0.7	0.6	(NA)	0.5
1919.....	(NA)	30	(NA)	0.4	0.3	0.3	(NA)	0.3
1909 ¹³	22	22	(NA)	0.3	0.1	0.2	(NA)	0.1
1902.....	26	⁶ 27	(NA)	0.3	0.1	⁹ 0.3	(NA)	0.1
1889.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1880.....	(NA)	⁶ 14	(NA)	0.1	(Z)	(NA)	(NA)	(NA)
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C., AND MISCELLANEOUS CLAY MINES IN MANUFACTURES								
1967, total ²	(NA)	473	41	3.5	20.3	3.1	6.5	17.4
Clay and related minerals, n.e.c., industry ²	(NA)	129	39	2.3	15.4	2.0	4.4	12.5
Miscellaneous clay mines in manufactures... ..	(NA)	344	2	³ 1.2	³ 4.9	³ 1.2	2.2	4.9
1963, total.....	495	649	44	3.9	18.8	3.6	7.4	16.6
Clay and related minerals, n.e.c., industry.....	115	130	34	2.0	10.7	1.7	3.6	8.5
Miscellaneous clay mines in manufactures... ..	410	519	10	³ 1.9	³ 8.1	³ 1.9	3.8	8.1
1958, total.....	529	703	44	3.8	16.0	3.5	7.2	14.0
Clay and related minerals, n.e.c., industry.....	113	126	36	2.0	8.9	1.7	3.7	7.0
Miscellaneous clay mines in manufactures... ..	439	577	8	³ 1.8	³ 7.1	³ 1.8	3.5	7.1
1954, total.....	678	805	(NA)	3.9	12.4	3.8	7.6	11.9
Clay and related minerals, n.e.c., industry ¹⁵	173	187	22	1.3	4.4	1.2	2.4	3.9
Miscellaneous clay mines in manufacture....	(NA)	⁶ 618	(NA)	³ 2.6	³ 8.1	³ 2.6	5.2	8.1
1939, total ¹¹	527	⁶ 621	(NA)	3.3	3.3	3.2	6.1	3.2
Clay and related minerals, n.e.c., industry.....	(NA)	⁶ 71	(NA)	0.7	0.8	0.7	(NA)	0.7
Miscellaneous clay mines in manufactures... ..	467	⁶ 550	(NA)	2.6	2.5	2.5	(NA)	2.4
Fire clay, kaolin and ball clay, and clay and related minerals, n.e.c.:								
1929.....	(NA)	204	(NA)	4.9	5.2	4.5	(NA)	4.2
1919.....	(NA)	356	(NA)	6.4	7.0	5.9	(NA)	6.0
1909 ¹³	273	274	(NA)	3.6	1.6	3.3	(NA)	1.4
1902 ^{13 15}	205	⁶ 206	(NA)	2.6	1.1	⁹ 2.4	(NA)	1.0
1860.....	(NA)	9	(NA)	0.1	(Z)	(NA)	(NA)	(NA)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry. For 1967, 1963, 1958, and 1954, for mineral industries, represents net shipments (gross shipments less minerals received from other establishments for preparation) and for mines in manufacturing establishments, represents shipments of clay plus production of clay for use at the same establishment in the manufacture of cement, structural clay products, and pottery products. For 1939 and earlier years, represents net production.²In 1967, for the first time data for establishments without paid employees were excluded from the Census. However, in 1963, for Group 145 there were only 54 establishments without paid employees in this industry accounting for approximately 1 percent of the industry's value added; for industry 1452 there were 3 establishments which accounted for less than 1 percent of the industry's value added; for industry 1453, there were 17 establishments which accounted for less than 5 percent of the industry's value added; for industry 1454, there were 3 establishments which accounted for less than 1 percent of the industry's value added; for industry 1455, there was 1 establishment which accounted for less than 1 percent of the industry's value added; for industry 1456, there were 6 establishments which accounted for less than 1 percent of the industry's value added; and for industry 1459, there were 24 establishments which accounted for less than 3 percent of the industry's value added.³The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.⁴Includes the estimated value of clay produced and used in the same establishment in the manufacture of cement, structural clay products, and pottery products.⁵Represents the sum of figures shown for separate industries and probably includes some duplication due to the same company operating in more than one industry.⁶Represents number of mines.⁷Excludes the cost of minerals received for preparation.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels purchased electric energy and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts ¹ (million dollars)	Quantity of primary products (1,000 short tons)	Capital expenditures (million dollars)
INDUSTRY 1455.--KAOLIN AND BALL CLAY--Continued							
1967 ²	65.1	24.3	10.1	87.9	86.5	4,468.0	11.6
1963.....	49.8	17.7	3.8	66.1	65.1	3,582.0	5.2
1958.....	31.0	12.7	2.9	42.4	(D)	2,580.0	4.2
1954 ¹⁴	25.2	8.3	2.6	31.9	31.9	2,012.0	4.3
1939 ^{11 14}	5.4	71.8	(NA)	(NA)	7.2	1,010.0	(NA)
1889.....	(NA)	(NA)	(NA)	(NA)	0.6	330.0	(NA)
1880.....	0.2	(Z)	(NA)	(NA)	0.2	23.0	(NA)
INDUSTRY 1456.--FELDSPAR--Continued							
1967 ²	6.6	3.1	0.3	9.4	8.6	669.0	0.5
1963.....	6.1	3.3	0.7	8.5	8.4	578.0	1.7
1958.....	4.5	2.4	1.3	6.9	6.4	439.0	1.3
1954.....	4.0	2.7	0.3	6.7	6.2	692.0	0.4
1939 ¹³	0.9	70.1	(NA)	(NA)	1.0	214.0	(NA)
1929 ¹³	1.6	70.3	(Z)	(NA)	1.9	205.0	(NA)
1919.....	0.4	0.1	(NA)	0.6	0.6	(NA)	(NA)
1909 ¹³	0.2	0.1	(NA)	0.3	0.3	(NA)	(NA)
1902.....	0.2	70.1	(NA)	(NA)	0.3	40.0	(NA)
1889.....	(NA)	(NA)	(NA)	(NA)	(Z)	7.0	(NA)
1880.....	0.1	(Z)	(NA)	0.1	0.1	22.0	(NA)
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C., AND MISCELLANEOUS CLAY MINES IN MANUFACTURES--Con.							
1967, total ²	57.0	25.2	(NA)	81.3	78.3	28,399.0	(NA)
Clay and related minerals, n.e.c., industry ²	35.7	19.3	4.6	54.1	51.1	7,960.0	5.5
Miscellaneous clay mines in manufactures....	21.3	5.9	(NA)	427.2	427.2	20,439.0	(NA)
1963, total.....	52.9	22.7	(NA)	75.3	(D)	35,909.0	(NA)
Clay and related minerals, n.e.c., industry	24.5	14.8	2.6	38.9	(D)	6,519.0	3.0
Miscellaneous clay mines in manufactures....	28.5	7.9	(NA)	436.3	436.3	29,390.0	(NA)
1958, total.....	49.4	18.2	(NA)	65.8	(D)	30,204.0	(NA)
Clay and related minerals, n.e.c., industry	19.1	11.9	2.2	29.3	(D)	4,972.0	4.0
Miscellaneous clay mines in manufactures....	30.3	6.2	(NA)	436.5	436.5	25,232.0	(NA)
1954, total.....	30.5	10.9	(NA)	40.7	(D)	30,227.0	(NA)
Clay and related minerals, n.e.c., industry ¹⁵	11.2	4.7	1.2	15.2	(D)	4,173.0	1.9
Miscellaneous clay mines in manufactures....	19.3	6.2	(NA)	425.5	425.5	26,054.0	(NA)
1939, total ¹¹	6.4	1.5	(NA)	(NA)	7.9	16,223.0	(NA)
Clay and related minerals, n.e.c., industry	2.0	0.3	(NA)	(NA)	2.3	(NA)	(NA)
Miscellaneous clay mines in manufactures....	4.4	71.2	(NA)	(NA)	5.5	(NA)	(NA)
Fire clay, kaolin and ball clay, and clay and related minerals, n.e.c.:							
1929.....	9.9	2.9	0.5	(NA)	12.8	4,408.0	(NA)
1919.....	9.5	2.7	(NA)	12.2	12.2	(NA)	(NA)
1909 ¹³	2.6	0.5	(NA)	3.0	3.0	(NA)	(NA)
1902 ^{13 15}	1.8	70.3	(NA)	(NA)	2.1	1,416.0	(NA)
1860.....	0.1	(Z)	(NA)	(NA)	0.1	(NA)	(NA)

⁸The figures for number of operating companies and number of establishments include data for 2 nonproducing establishments for which other data are combined with figures for metal mining.

⁹Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.

¹⁰Includes crude bentonite produced in other industries, amounting to less than one percent of the total shown.

¹¹For 1939, establishments primarily producing rotary drilling muds were classified in the Kaolin and Ball Clay Industry. For later years, all clays were classified by type rather than by use and establishments primarily producing rotary drilling muds in that year were probably classified in the Bentonite Industry or the Clay and Related Minerals, N.E.C., Industry. For census years prior to 1939, according to the United States Bureau of Mines, there was no production of bentonite.

¹²Excludes data for one mining operation in Hawaii with less than 5 employees.

¹³Excludes nonproducing establishments as follows: For 1939, fire clay, 2 mines; feldspar, 1 mine and 1 plant. For 1929, feldspar, 3 establishments. For 1909, feldspar, 1 establishment; clay and related minerals, n.e.c., 17 establishments; for 1902, clay and related minerals, n.e.c., 7 establishments.

¹⁴For 1954, in addition to these establishments, 8 mines included in establishments classified in the manufacturing industries were reported. These mines produced and used in the same establishment 104 thousand tons of kaolin and ball clay, valued at approximately \$1,532 thousand.

Man-hours worked by production, development, and exploration workers at these mines were 46 thousand; payroll, \$59 thousand; and cost of supplies, fuels, and purchased electric energy and contract work, \$33 thousand. Figures for these establishments are included in the totals for all clay and related minerals mines operated in 1954 and parts of manufacturing establishments. For 1939, includes data for 18 mines included in establishments classified in the manufacturing industries. These mines had products valued at \$362 thousand; with total employment of 197, of which 178 were production, development, and exploration workers; the corresponding payrolls were \$119 thousand and \$87 thousand, respectively; and cost of supplies, fuel, purchased electric energy and contract work was \$77 thousand.

¹⁵For 1954, and possibly for earlier years, excludes data for associated magnesite calcining operations. The quantity figures for magnesite included in 1954, and possibly for earlier years, represent shipments of crude material and transfers of crude or crushed and ground material to associate calcining plants.

TABLE 2A. General Statistics by Geographic Area and Type of of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1452.--BENTONITE													
United States.....	32	16	0.9	5.4	0.6	1.4	3.4	13.2	8.8	21.2	0.9	0.8	11.4
<u>Geographic Area</u>													
North Central Region and South Region...	15	7	0.4	2.7	0.3	0.6	1.3	4.9	3.0	7.7	0.2	(NA)	(NA)
West Region.....	17	9	0.4	2.8	0.3	0.8	2.2	8.3	5.9	13.5	0.6	0.4	5.4
<u>Type of Operation</u>													
Producing mines with preparation plants.	20	13	0.6	3.5	0.5	1.2	2.8	12.1	8.2	19.7	0.6	0.8	11.0
INDUSTRY 1453.--FIRE CLAY													
United States.....	99	12	0.8	5.1	0.7	1.4	4.2	18.5	6.2	23.1	1.5	1.0	12.6
<u>Geographic Area</u>													
Middle Atlantic Division.....	34	5	0.3	1.5	0.3	0.5	1.3	5.1	1.2	6.0	0.3	0.3	3.5
North Central Region.....	40	5	0.4	2.4	0.3	0.7	1.8	9.1	3.1	11.4	0.7	0.5	6.4
South Region.....	13	2	0.1	0.9	0.1	0.2	0.8	3.6	1.5	4.6	0.4	(NA)	(NA)
West Region.....	12	-	(Z)	0.3	(Z)	0.1	0.3	0.7	0.4	1.1	(Z)	(NA)	(NA)
<u>Type of Operation</u>													
Mines only (open pit).....	79	4	0.4	2.4	0.4	0.8	2.2	13.3	3.4	15.8	0.9	0.5	7.3
INDUSTRY 1454.--FULLER'S EARTH													
United States.....	16	11	1.1	5.1	1.0	2.0	4.1	15.6	11.0	22.5	4.1	0.8	9.1
INDUSTRY 1455.--KAOLIN AND BALL CLAY													
United States.....	63	34	3.7	24.1	2.9	6.4	16.7	65.1	34.4	87.9	11.6	3.3	49.8
<u>Geographic Area</u>													
Northeast Region, North Central Region, and South Atlantic Division.....	45	25	3.2	20.8	2.4	5.4	14.0	56.4	30.7	76.2	10.9	2.8	42.6
Georgia.....	27	15	2.5	16.1	2.0	4.6	12.2	51.0	27.3	67.8	10.5	2.3	37.3
<u>Type of Operation</u>													
Mines with preparation plants (open pit)	36	26	3.2	19.6	2.6	5.9	15.1	61.9	32.9	83.5	11.3	3.2	48.2
INDUSTRY 1456.--FELDSPAR													
United States.....	17	9	0.5	2.6	0.4	0.9	2.0	6.6	3.4	9.4	0.5	0.5	6.1
<u>Geographic Area</u>													
South Atlantic Division.....	7	6	0.3	1.5	0.3	0.6	1.2	3.8	2.5	6.1	0.3	(NA)	(NA)
<u>Type of Operation</u>													
Producing mines with preparation plants.	11	9	0.4	2.3	0.4	0.9	1.9	6.4	3.3	9.2	0.5	0.4	5.5

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.													
United States, total.....	129	39	2.3	15.4	2.0	4.4	12.5	35.7	23.9	54.1	5.5	2.0	24.5
<u>Geographic Area</u>													
Northeast Region.....	16	3	0.2	1.4	0.2	0.4	1.1	3.1	2.7	5.4	0.5	(NA)	(NA)
Pennsylvania.....	9	-	0.1	0.4	0.1	0.1	0.3	1.1	0.3	1.3	0.1	(NA)	(NA)
East North Central Division.....	19	7	0.4	2.8	0.3	0.7	2.5	5.9	5.8	9.1	2.5	0.3	3.4
West North Central Division.....	20	2	0.2	1.0	0.1	0.3	0.8	2.0	1.4	3.2	0.2	0.1	1.2
South Atlantic Division.....	18	9	0.5	2.7	0.4	0.9	2.1	7.0	3.6	10.1	0.4	0.5	4.4
North Carolina.....	6	1	0.1	0.3	0.1	0.1	0.3	0.5	0.6	1.1	(Z)	0.1	0 0.5
East South Central Division.....	12	6	0.2	1.4	0.2	0.4	1.1	4.0	2.3	5.6	0.6	0.1	1.1
Alabama.....	7	2	0.1	0.4	0.1	0.1	0.4	1.8	0.9	2.3	0.3	(NA)	(NA)
West South Central Division.....	13	5	0.3	1.9	0.2	0.6	1.4	4.4	2.3	6.4	0.3	0.2	3.1
West Region.....	31	7	0.6	4.3	0.5	1.1	3.5	9.4	5.8	14.3	0.9	0.6	9.8
California.....	15	5	0.2	1.6	0.2	0.4	1.3	2.8	2.3	4.8	0.3	0.1	1.4
<u>Type of Operation</u>													
Producing mines with preparation plants	62	38	2.0	14.0	1.8	3.9	11.3	32.6	22.4	49.8	5.2	1.8	22.5

Note: Detail may not add to total because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

TABLE 2B. General Statistics for Manufacturing Establishments With Mining Operations by Geographic Area: 1967 and 1963

(See appendix, Explanation of Terms)

Industry and geographic area	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc.	Value of shipments and receipts	Capital expenditures	All employees ¹	Value added in mining
	Total	With 20 employees or more	Number ¹	Payroll	Number ¹	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
FIRE CLAY MINES INCLUDED IN MANUFACTURES													
United States.....	35	1	0.2	1.1	0.2	0.4	1.1	7.1	2.3	9.4	(NA)	1.2	18.0
North Central Region.....	18	-	0.1	0.6	0.1	0.2	0.6	1.9	1.4	3.3	(NA)	0.6	8.6
South Atlantic Division.....	4	-	(Z)	0.1	(Z)	0.1	0.1	1.1	0.2	1.3	(NA)	(NA)	(NA)
East South Central Division and West South Central Division.....	7	1	(Z)	0.3	(Z)	0.1	0.3	2.7	0.6	3.2	(NA)	(NA)	(NA)
MISCELLANEOUS CLAY MINES INCLUDED IN MANUFACTURES													
United States.....	344	2	1.2	4.9	1.2	2.2	4.9	21.3	5.9	27.2	(NA)	1.9	28.5
New England Division.....	11	-	(Z)	0.2	(Z)	0.1	0.2	0.3	0.2	0.5	(NA)	(NA)	(NA)
North Central Region.....	108	-	0.3	1.4	0.3	0.6	1.4	4.5	1.7	6.2	(NA)	0.5	8.8
Iowa.....	15	-	(Z)	0.2	(Z)	0.1	0.2	0.3	0.3	0.6	(NA)	(NA)	(NA)
South Atlantic Division.....	70	1	0.3	1.2	0.3	0.6	1.2	9.9	1.2	11.1	(NA)	0.3	4.9
Virginia.....	12	-	(Z)	0.1	(Z)	0.1	0.1	1.0	0.2	1.2	(NA)	(NA)	(NA)
North Carolina.....	24	-	0.1	0.4	0.1	0.2	0.4	3.1	0.5	3.6	(NA)	0.1	1.5
South Carolina.....	11	-	(Z)	0.1	(Z)	0.1	0.1	3.1	0.1	3.2	(NA)	(NA)	(NA)
East South Central Division.....	32	-	0.1	0.5	0.1	0.2	0.5	1.9	0.8	2.7	(NA)	0.2	2.3
Alabama.....	13	-	0.1	0.2	0.1	0.1	0.2	0.7	0.3	1.0	(NA)	(NA)	(NA)
West South Central Division.....	54	1	0.2	0.9	0.2	0.4	0.9	2.5	1.2	3.7	(NA)	(NA)	(NA)
Oklahoma.....	9	-	(Z)	0.1	(Z)	0.1	0.1	0.4	0.1	0.5	(NA)	(NA)	(NA)

Note: Detailed figures may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than 50 employees.

¹The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967

Item	145.—Clay and Related Minerals, total	1452.—Bentonite			1453.—Fire Clay		
		United States	West region	Producing mines with preparation plants	United States	Middle Atlantic Division	Open-pit mines only
Establishments, total.....number..	356	32	17	20	99	34	79
With 1 to 19 employees.....do....	235	16	8	7	87	29	75
With 20 to 99 employees.....do....	108	15	9	13	12	5	4
With 100 employees or more.....do....	13	1	—	—	—	—	—
All employees (average for the year).....1,000..	9.3	0.9	0.4	0.6	0.8	0.3	0.4
Payroll (all employees), total for year..million dollars..	57.7	5.4	2.8	3.5	5.1	1.5	2.4
Production, development, and exploration workers:							
Average for the year.....1,000..	7.5	0.6	0.3	0.5	0.7	0.3	0.4
March.....do....	7.5	0.6	0.3	0.5	0.7	0.2	0.4
May.....do....	7.5	0.6	0.3	0.5	0.7	0.3	0.4
August.....do....	7.7	0.6	0.3	0.5	0.7	0.3	0.4
November.....do....	7.5	0.6	0.3	0.5	0.7	0.3	0.4
Man-hours.....millions..	16.5	1.4	0.8	1.2	1.4	0.5	0.8
January-March.....do....	4.1	0.4	0.2	0.3	0.3	0.1	0.2
April-June.....do....	4.0	0.4	0.2	0.3	0.3	0.1	0.2
July-September.....do....	4.2	0.4	0.2	0.3	0.3	0.1	0.2
October-December.....do....	4.3	0.3	0.2	0.3	0.5	0.2	0.2
Wages.....million dollars..	42.9	3.4	2.2	2.8	4.2	1.3	2.2
Supplemental labor cost not included in payroll.....do....	5.6	0.4	0.3	0.4	0.5	0.1	0.2
Legally required expenditures, including Social Security contributions.....do....	3.1	0.3	0.2	0.2	0.3	0.1	0.1
Payments for voluntary programs.....do....	2.5	0.2	0.1	0.1	0.2	(Z)	0.1
Cost of supplies, etc., total.....do....	87.6	8.8	5.9	8.2	6.2	1.2	3.4
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	57.3	5.4	3.7	5.0	3.9	0.7	2.0
Cost of resales.....do....	2.1	0.8	0.8	0.8	0.2	—	—
Purchased fuels consumed.....do....	14.6	0.8	0.4	0.7	0.7	0.2	0.3
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	539.0	41.9	25.1	41.3	13.8	1.9	2.3
Cost.....million dollars..	6.4	0.6	0.4	0.6	0.3	(Z)	(Z)
Generated less sold.....million kw.-hrs..	(Z)	—	—	—	—	—	—
Contract work.....million dollars..	7.3	1.3	0.5	1.2	1.1	0.3	1.0
Value of shipments and receipts (including resales), total.....do....	218.3	21.2	13.5	19.7	23.1	6.0	15.8
Value of resales.....do....	2.4	1.0	1.0	1.0	0.2	—	—
Value added in mining.....do....	154.7	13.2	8.3	12.1	18.5	5.1	13.3
Capital expenditures (except land and mineral rights), total.....do....	24.0	0.9	0.6	0.6	1.5	0.3	0.9
Mineral development and exploration.....do....	0.9	(Z)	(Z)	(Z)	0.3	0.1	0.2
New structures and additions.....do....	2.3	0.2	0.1	(Z)	0.2	(Z)	(Z)
New machinery and equipment.....do....	20.4	0.7	0.5	0.5	0.9	0.2	0.5
Used plant and equipment.....do....	0.5	(Z)	(Z)	(Z)	0.1	(Z)	0.1
Gross book value of fixed assets, total.....do....	277.8	17.2	12.7	15.0	21.3	5.5	9.8
Mineral properties.....do....	24.0	2.9	2.4	2.8	3.2	1.4	2.3
Building and other structures (excluding land).....do....	48.5	2.8	2.0	2.4	3.4	0.4	0.6
Machinery and equipment.....do....	205.2	11.5	8.2	9.9	14.7	3.6	7.0
Mineral development and exploration expenditures, total.....do....	2.3	0.3	0.2	0.3	0.5	0.3	0.4
Capitalized.....do....	0.6	(Z)	(Z)	(Z)	0.1	(Z)	0.1
Expensed.....do....	1.7	0.3	0.2	0.3	0.4	0.3	0.4
Mineral rights and geological expenditures.....do....	2.0	0.2	0.2	0.2	0.1	(Z)	0.1
Lease and land acquisition of nonproducing acreage.....do....	0.6	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Geological and geophysical.....do....	0.2	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Lease rents.....do....	1.1	0.2	0.2	0.1	0.1	(Z)	0.1
Net shipments of primary product.....1,000 short tons..	18,657.8	1,951.8	1,123.0	1,923.6	2,886.3	526.8	1,893.6
Crude minerals mined during 1967, by ownership.....do....	23,007.4	2,446.0	1,702.7	2,154.4	2,444.0	467.6	1,483.2
Production for own account.....do....	10,984.4	1,406.7	937.1	1,158.0	643.9	68.7	480.5
Production for accounts of others.....do....	311.5	—	—	—	227.5	7.2	165.7
Royalty production.....do....	7,283.5	1,039.3	765.5	996.4	951.4	158.4	476.3
Royalties paid.....million dollars..	—	0.4	0.3	0.4	0.2	(Z)	0.1
Undistributed.....1,000 short tons..	4,427.9	—	—	—	621.1	233.3	360.8
Man-hours worked by production, development, and exploration workers, total.....millions..	16.5	1.4	0.8	1.2	1.4	0.5	0.8
At mines, total.....do....	6.1	0.4	0.3	0.2	1.0	0.5	0.8
Underground.....do....	0.3	—	—	—	0.1	(Z)	—
Open-pit.....do....	5.0	0.4	0.2	0.2	0.9	0.4	0.8
Surface (including mine shops and yards).....do....	0.7	(Z)	(Z)	(Z)	0.1	(Z)	(Z)
At preparation plants.....do....	10.5	1.0	0.6	1.0	0.4	(Z)	—
Man-hours spent on exploration and development (included above).....do....	0.3	(Z)	(Z)	(Z)	0.1	0.1	0.1

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	1454.- Fuller's Earth United States	1455.-Kaolin and Ball Clay			1456.-Feldspar		
		United States	Georgia	Producing open-pit mines with preparation plants	United States	South Atlantic Division	Producing open-pit mines with preparation plants
Establishments, total.....number..	16	63	27	36	17	7	11
With 1 to 19 employees.....do....	5	29	12	10	8	1	2
With 20 to 99 employees.....do....	9	27	10	20	9	6	9
With 100 employees or more.....do....	2	7	5	6	-	-	-
All employees (average for the year).....1,000..	1.1	3.7	2.5	3.2	0.5	0.3	0.4
Payroll (all employees), total for year..million dollars..	5.1	24.1	16.1	19.6	2.6	1.5	2.3
Production, development, and exploration workers:							
Average for the year.....1,000..	1.0	2.9	2.0	2.6	0.4	0.3	0.4
March.....do....	1.0	2.9	2.0	2.6	0.4	0.3	0.4
May.....do....	0.9	2.9	2.0	2.6	0.4	0.3	0.4
August.....do....	1.0	2.9	2.1	2.7	0.4	0.3	0.4
November.....do....	1.0	2.9	2.0	2.6	0.4	0.3	0.4
Man-hours.....millions..	2.0	6.4	4.6	5.9	0.9	0.6	0.9
January-March.....do....	0.5	1.6	1.2	1.5	0.2	0.1	0.2
April-June.....do....	0.5	1.4	0.9	1.3	0.2	0.2	0.2
July-September.....do....	0.5	1.7	1.2	1.6	0.2	0.2	0.2
October-December.....do....	0.5	1.7	1.2	1.5	0.2	0.1	0.2
Wages.....million dollars..	4.1	16.7	12.2	15.1	2.0	1.2	1.9
Supplemental labor cost not included in payroll....do....	0.4	2.7	2.2	2.5	0.2	0.1	0.2
Legally required expenditures, including Social							
Security contributions.....do....	0.3	1.3	0.9	1.1	0.1	0.1	0.1
Payments for voluntary programs.....do....	0.1	1.4	1.3	1.4	0.1	(Z)	0.1
Cost of supplies, etc., total.....do....	11.0	34.4	27.3	32.9	3.4	2.5	3.3
Supplies used, minerals received for preparation,							
and purchased machinery installed.....do....	7.8	25.1	19.6	23.9	2.0	1.5	1.9
Cost of resales.....do....	(Z)	0.6	0.5	0.6	-	-	-
Purchased fuels consumed.....do....	1.8	3.6	2.7	3.4	0.4	0.3	0.4
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	43.5	260.7	222.5	254.3	34.4	21.9	33.6
Cost.....million dollars..	0.5	2.6	2.2	2.6	0.4	0.3	0.4
Generated less sold.....million kw.-hrs..	-	-	-	-	-	-	-
Contract work.....million dollars..	0.9	2.4	2.2	2.4	0.6	0.5	0.5
Value of shipments and receipts (including resales),							
total.....do....	22.5	87.9	67.8	83.5	9.4	6.1	9.2
Value of resales.....do....	(Z)	0.7	0.6	0.7	-	-	-
Value added in mining.....do....	15.6	65.1	51.0	61.9	6.6	3.8	6.4
Capital expenditures (except land and mineral rights),							
total.....do....	4.1	11.6	10.5	11.3	0.5	0.3	0.5
Mineral development and exploration.....do....	0.2	0.2	0.1	0.2	(Z)	(Z)	(Z)
New structures and additions.....do....	0.3	0.6	0.5	0.6	0.1	(Z)	0.1
New machinery and equipment.....do....	3.5	10.7	9.8	10.5	0.4	0.2	0.4
Used plant and equipment.....do....	(Z)	0.1	(Z)	0.1	(Z)	(Z)	(Z)
Gross book value of fixed assets, total.....do....	29.6	116.6	95.3	112.2	9.8	5.9	9.6
Mineral properties.....do....	2.1	12.7	8.3	11.6	1.0	0.8	1.0
Building and other structures (excluding land).....do....	3.1	22.7	18.7	22.2	2.4	1.3	2.4
Machinery and equipment.....do....	24.4	81.3	68.3	78.4	6.4	3.8	6.2
Mineral development and exploration expenditures,							
total.....do....	0.4	0.8	0.7	0.6	(Z)	(Z)	(Z)
Capitalized.....do....	0.2	0.2	0.1	0.2	-	-	-
Expensed.....do....	0.2	0.6	0.5	0.5	(Z)	(Z)	(Z)
Mineral rights and geological expenditures.....do....	0.1	1.2	1.0	0.7	0.1	0.1	0.1
Lease and land acquisition of nonproducing acreage.....do....	(Z)	0.5	0.4	0.2	-	-	-
Geological and geophysical.....do....	-	0.2	0.2	0.1	-	-	-
Lease rents.....do....	0.1	0.5	0.4	0.4	0.1	0.1	0.1
Net shipments of primary product.....1,000 short tons..	¹ 761.2	4,468.0	¹ 3,114.6	¹ 4,055.7	¹ 669.8	¹ 416.4	¹ 592.8
Crude minerals mined during 1967, by ownership.....do....	1,251.1	6,293.7	4,720.2	5,820.9	1,131.0	809.1	1,093.9
Production for own account.....do....	523.4	2,955.5	2,196.6	2,851.5	534.1	446.5	529.7
Production for accounts of others.....do....	-	84.0	50.0	-	-	-	-
Royalty production.....do....	542.3	3,153.6	2,385.3	2,875.1	513.2	362.7	513.2
Royalties paid.....million dollars..	0.1	1.0	0.7	0.8	0.3	0.2	0.3
Undistributed.....1,000 short tons..	185.4	100.5	88.3	94.3	83.7	-	50.9
Man-hours worked by production, development, and							
exploration workers, total.....millions..	2.0	6.4	4.6	5.9	0.9	0.6	0.9
At mines, total.....do....	0.3	2.0	1.0	1.5	0.3	0.2	0.3
Underground.....do....	-	0.2	-	-	-	-	-
Open-pit.....do....	0.3	1.5	0.9	1.3	0.2	0.1	0.2
Surface (including mine shops and yards).....do....	(Z)	0.3	0.1	0.2	0.1	0.1	0.1
At preparation plants.....do....	1.7	4.4	3.6	4.4	0.6	0.4	0.6
Man-hours spent on exploration and development							
(included above).....do....	(Z)	0.2	0.1	0.2	-	-	-

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations:
1967-Continued

Item	1459.-Clay and Related Minerals, N.E.C.				
	United States	East North Central Division	South Atlantic Division	West Region (Mountain and Pacific)	Producing mines with preparation plants
Establishments, total.....number..	129	19	18	31	62
With 1 to 19 employees.....do....	90	12	9	24	24
With 20 to 99 employees.....do....	36	5	9	6	35
With 100 employees or more.....do....	3	2	-	1	3
All employees (average for the year).....1,000..	2.3	0.4	0.5	0.6	2.0
Payroll (all employees), total for year..million dollars..	15.4	2.8	2.7	4.3	14.0
Production, development, and exploration workers:					
Average for the year.....1,000..	2.0	0.3	0.4	0.5	1.8
March.....do....	2.0	0.3	0.4	0.5	1.7
May.....do....	2.0	0.3	0.4	0.5	1.8
August.....do....	2.0	0.3	0.4	0.5	1.8
November.....do....	2.0	0.3	0.4	0.5	1.7
Man-hours.....millions..	4.4	0.7	0.9	1.1	3.9
January-March.....do....	1.1	0.2	0.2	0.3	1.0
April-June.....do....	1.2	0.2	0.3	0.3	1.0
July-September.....do....	1.1	0.2	0.2	0.3	1.0
October-December.....do....	1.1	0.2	0.2	0.3	0.9
Wages.....million dollars..	12.5	2.5	2.1	3.5	11.3
Supplemental labor cost not included in payroll.....do....	1.3	0.2	0.2	0.5	1.3
Legally required expenditures, including Social Security contributions.....do....	0.8	0.1	0.1	0.3	0.7
Payments for voluntary programs.....do....	0.5	0.1	0.1	0.2	0.5
Cost of supplies, etc., total.....do....	23.9	5.8	3.6	5.8	22.4
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	13.2	3.7	2.1	3.0	12.2
Cost of resales.....do....	0.4	0.4	(Z)	(Z)	0.4
Purchased fuels consumed.....do....	7.3	1.2	1.0	1.8	7.1
Electric energy:					
Purchased:					
Quantity.....million kw.-hrs..	144.6	27.3	29.2	49.9	141.1
Cost.....million dollars..	2.0	0.4	0.4	0.6	1.9
Generated less sold.....million kw.-hrs..	(Z)	-	-	(Z)	-
Contract work.....million dollars..	1.0	0.1	0.2	0.4	0.8
Value of shipments and receipts (including resales), total.....do....	54.1	9.1	10.1	14.3	49.8
Value of resales.....do....	0.5	0.4	(Z)	-	0.5
Value added in mining.....do....	35.7	5.9	7.0	9.4	32.6
Capital expenditures (except land and mineral rights), total.....do....	5.5	2.5	0.4	0.9	5.2
Mineral development and exploration.....do....	0.1	-	(Z)	(Z)	0.1
New structures and additions.....do....	0.9	0.5	0.1	0.1	0.9
New machinery and equipment.....do....	4.2	2.0	0.3	0.7	4.0
Used plant and equipment.....do....	0.3	0.1	0.1	(Z)	0.2
Gross book value of fixed assets, total.....do....	83.3	16.0	17.5	27.6	79.1
Mineral properties.....do....	2.3	0.2	0.6	0.4	2.1
Building and other structures (excluding land).....do....	14.0	1.6	2.9	4.1	13.7
Machinery and equipment.....do....	66.9	14.2	14.0	23.2	63.3
Mineral development and exploration expenditures, total.....do....	0.4	-	(Z)	0.2	0.4
Capitalized.....do....	0.1	-	(Z)	(Z)	0.1
Expensed.....do....	0.3	-	(Z)	0.2	0.3
Mineral rights and geological expenditures.....do....	0.3	(Z)	(Z)	0.2	0.2
Lease and land acquisition of nonproducing acreage.....do....	0.1	-	-	0.1	0.1
Geological and geophysical.....do....	(Z)	-	-	(Z)	(Z)
Lease rents.....do....	0.1	(Z)	(Z)	0.1	0.1
Net shipments of primary product.....1,000 short tons..	7,960.1	1,314.1	1,192.0	1,499.5	6,953.7
Crude minerals mined during 1967, by ownership.....do....	9,441.6	1,539.7	2,021.6	1,720.5	8,720.9
Production for own account.....do....	4,920.8	1,134.8	879.0	745.0	4,772.9
Production for accounts of others.....do....	-	-	-	-	-
Royalty production.....do....	1,083.6	76.5	110.0	554.9	987.3
Royalties paid.....million dollars..	0.3	(Z)	(Z)	0.2	0.3
Undistributed.....1,000 short tons..	3,437.2	328.4	1,032.7	420.6	2,960.7
Man-hours worked by production, development, and exploration workers, total.....millions..	4.4	0.7	0.9	1.1	3.9
At mines, total.....do....	2.0	0.2	0.5	0.5	1.5
Underground.....do....	(Z)	-	-	(Z)	-
Open-pit.....do....	1.7	0.2	0.5	0.5	1.3
Surface (including mine shops and yards).....do....	0.2	0.1	(Z)	0.1	0.2
At preparation plants.....do....	2.4	0.5	0.4	0.5	2.4
Man-hours spent on exploration and development (included above).....do....	(Z)	(Z)	-	(Z)	(Z)

Note: Detail may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosure of individual company data. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹Represents material mined and prepared at the same establishment and material received from other establishments for preparation.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1452	Bentonite:										
	Establishments, total.....	32	0.9	5.4	0.6	1.4	3.4	13.2	8.8	21.2	0.9
	Establishments with an average of-										
	0 to 4 employees.....	4	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.1	.4	(Z)
	5 to 9 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	10	0.1	0.8	0.1	0.2	0.7	2.1	1.6	3.4	0.4
	20 to 49 employees.....	12	0.4	2.1	0.3	0.7	1.5	6.5	4.2	10.5	0.2
	50 to 99 employees.....	3	0.3	2.3	0.1	0.5	1.2	4.4	3.0	7.0	0.3
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records ¹	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1453	Fire clay:										
	Establishments, total.....	99	0.8	5.1	0.7	1.4	4.2	18.5	6.2	23.1	1.5
	Establishments with an average of-										
	0 to 4 employees.....	47	0.1	0.5	0.1	0.2	0.4	6.2	1.2	7.2	0.2
	5 to 9 employees.....	32	0.2	1.2	0.2	0.4	1.1	4.5	1.8	5.9	0.4
	10 to 19 employees.....	8	0.1	0.7	0.1	0.2	0.5	2.5	0.6	3.0	0.3
	20 to 49 employees.....	11	0.4	2.8	0.3	0.6	2.2	5.2	2.5	7.1	0.6
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records ¹	26	(Z)	0.2	(Z)	0.1	0.2	0.7	0.3	0.9	0.1
1454	Fuller's earth:										
	Establishments, total.....	16	1.1	5.1	1.0	2.0	4.1	15.6	11.0	22.5	4.1
	Establishments with an average of-										
	0 to 4 employees.....	2	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.5	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	0.2	0.9	0.2	0.3	0.7	2.8	1.2	3.7	0.4
	50 to 99 employees.....	4	0.9	4.1	0.7	1.7	3.3	12.4	9.6	18.4	3.7
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records ¹	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1455	Kaolin and ball clay:										
	Establishments, total.....	63	3.7	24.1	2.9	6.4	16.7	65.1	34.4	87.9	11.6
	Establishments with an average of-										
	0 to 4 employees.....	14	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.1	0.4	(Z)
	5 to 9 employees.....	8	0.1	0.3	(Z)	0.1	0.2	1.1	0.3	1.3	0.1
	10 to 19 employees.....	7	0.1	0.8	0.1	0.1	0.3	1.5	0.7	2.2	0.1
	20 to 49 employees.....	17	0.5	3.3	0.4	0.9	2.1	8.5	4.6	12.0	1.0
	50 to 99 employees.....	10	1.1	7.3	0.9	1.8	4.7	17.5	8.2	22.9	2.6
	100 to 249 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	2	2.0	12.3	1.5	3.4	9.3	36.3	20.5	39.1	7.7
	500 to 999 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records ¹	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1456	Feldspar:										
	Establishments, total.....	17	0.5	2.6	0.4	0.9	2.0	6.6	3.4	9.4	0.5
	Establishments with an average of-										
	0 to 4 employees.....	3	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	4	0.1	0.4	(Z)	0.1	0.2	0.3	0.3	0.5	0.1
	20 to 49 employees.....	6	0.4	2.2	0.4	0.9	1.8	6.2	3.1	8.9	0.5
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establs. covered by admin. records ¹	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1459	Clay and related minerals, n.e.c.:										
	Establishments, total.....	129	2.3	15.4	2.0	4.4	12.5	35.7	23.9	54.1	5.5
	Establishments with an average of-										
	0 to 4 employees.....	53	0.1	0.4	0.1	0.1	0.4	0.9	0.5	1.3	0.1
	5 to 9 employees.....	17	0.1	0.7	0.1	0.2	0.6	1.6	0.9	2.4	0.1
	10 to 19 employees.....	20	0.3	1.8	0.3	0.6	1.5	5.3	2.4	7.2	0.5
	20 to 49 employees.....	32	1.0	7.2	0.8	2.0	5.4	18.1	12.5	28.5	2.1
	50 to 99 employees.....	4	0.3	1.8	0.3	0.6	1.5	3.2	1.6	4.7	0.3
	Establs. covered by admin. records ¹	29	(Z)	0.1	(Z)	0.1	0.1	0.4	0.2	0.6	(Z)

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. (NA) Not available. (X) Not applicable. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated has fewer than 5 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1452	Bentonite.....1967..	21.2	19.7	(D)	(D)	(D)	(D)	¹ 20.1	(D)
	1963..	18.1	16.9	(D)	(D)	(D)	(D)	¹ 17.2	(D)
1453	Fire clay.....1967..	23.1	22.2	(D)	-	(D)	² 31.7	22.2	² 9.5
	1963..	17.1	16.4	(D)	(D)	0.1	² 40.5	16.3	² 24.2
1454	Fuller's earth.....1967..	22.5	19.7	(D)	(D)	(D)	(D)	(D)	-
	1963..	13.0	10.1	(D)	-	(D)	10.1	10.1	-
1455	Kaolin and ball clay.....1967..	87.9	86.6	0.6	-	0.7	89.7	(D)	(D)
	1963..	66.1	65.2	(D)	-	(D)	67.3	(D)	(D)
1456	Feldspar.....1967..	9.4	(D)	(D)	-	-	9.0	8.6	0.4
	1963..	8.5	7.7	0.8	-	-	8.2	7.6	0.6
1459	Clay related minerals, n.e.c.....1967..	54.1	52.3	1.3	(D)	(D)	³ 80.4	51.1	³ 29.3
	1963..	38.9	37.5	1.3	(D)	(D)	³ 75.4	37.5	³ 37.9

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

¹Includes bentonite produced in other mineral industries, amounting to approximately 2 percent of the total shown.

²Includes the estimated value of fire clay produced and used in the same establishment in the manufacture of cement and clay products.

³Includes the estimated value of common clay and shale produced and used in the same establishment in manufacture of cement and clay products.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	1967		1963	
		Quantity (1,000 short tons)	Value (million dollars)	Quantity (1,000 short tons)	Value (million dollars)
1452- --	BENTONITE, TOTAL.....	(X)	20.1	(X)	17.2
	UNITED STATES				
14521 01	Crude bentonite shipments.....	362.6	1.7	¹ 241.0	¹ 1.2
14522 01	Prepared bentonite shipped, including interplant transfers, total.....	(NA)	(NA)	(D)	(D)
	Prepared in the mineral industries.....	1,611.3	18.4	1,404.0	16.0
	Prepared in other industries.....	(NA)	(NA)	(D)	(D)
	NORTH CENTRAL AND SOUTH REGIONS				
14521 01	Crude bentonite shipments.....	140.3	0.6	¹ 47.0	¹ 0.6
14522 01	Prepared bentonite produced in the mineral industries.....	486.8	7.1	558.0	7.6
	WEST REGION				
14521 01	Crude bentonite shipments.....	222.3	1.2	¹ 94.0	¹ 0.6
14522 01	Prepared bentonite produced in the mineral industries.....	1,124.5	11.3	846.0	8.4
1453- --	FIRE CLAY, TOTAL.....	(X)	22.2	(X)	19.5
	UNITED STATES				
	Crude fire clay mined and used in the same establishment in making clay products ²	1,392.4	(X)	4,571.0	(X)
14531 01	Crude fire clay.....	2,097.2	16.2	3,178.0	13.7
14532 01	Prepared fire clay.....	826.7	6.0	1,069.0	5.8
	MIDDLE ATLANTIC				
14531 01	Crude fire clay.....	477.7	5.0	831.0	4.0
14532 01	Prepared fire clay.....	49.1	0.4	198.0	1.2
	NORTH CENTRAL				
14531 01	Crude fire clay.....	988.3	7.7	1,757.0	7.2
14532 01	Prepared fire clay.....	547.1	3.5	508.0	2.5
	SOUTH				
14531 01	Crude fire clay.....	551.3	4.5	212.0	1.1
14532 01	Prepared fire clay.....			269.0	1.7
14531 01	East South Central, crude fire clay.....	126.2	1.5	(NA)	(NA)
	WEST				
14531 01	Crude fire clay.....	310.4	1.1	378.0	1.4
14532 01	Prepared fire clay.....			94.0	0.4
14531 01	California, crude and prepared fire clay.....	217.5	0.6	(NA)	(NA)
14532 01					
1454- --	FULLER'S EARTH.....	761.2	19.7	462.0	10.1

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	1967		1963		
		Quantity (1,000 short tons)	Value (million dollars)	Quantity (1,000 short tons)	Value (million dollars)	
1455- --	KAOLIN AND BALL CLAY, TOTAL.....	(X)	88.7	(X)	67.3	
	UNITED STATES					
14551 01	Crude kaolin and ball clay net shipments ¹	415.3	3.1	331.0	2.4	
14552 01	Prepared kaolin and ball clay shipped, including interplant transfers.....	4,087.2	85.6	3,269.0	64.9	
	SOUTH ATLANTIC					
14551 01	Crude kaolin and ball clay net shipments ¹	³ 191.1	³ 0.9			
14552 01	Prepared kaolin and ball clay shipped, including interplant transfers.....	3,456.5	76.3	(NA)	(NA)	
	Georgia:					
14551 01	Crude kaolin and ball clay net shipments ¹	3,144.6	68.7	2,326.0	50.5	
14552 01	Prepared kaolin and ball clay shipped, including interplant transfers...					
1456- --	FELDSPAR, TOTAL.....	(X)	9.1	(X)	8.3	
14561 01	Crude feldspar shipped.....	34.6	0.2	25.0	0.1	
14562 01	Prepared feldspar shipped.....	635.2	8.8	593.0	8.1	
	SOUTH ATLANTIC					
14562 01	Prepared feldspar shipped.....	416.4	5.5	(NA)	(NA)	
1459- --	CLAY AND RELATED MINERALS, N.E.C., TOTAL.....	(X)	55.2	(X)	43.0	
	UNITED STATES					
14590 01	Crude common clay and shale mined and used in the same establishment in making cement and clay products ⁴	20,439.6	(X)	28,880.0	(X)	
14591 01						
14590 01	Crude common clay and shale.....	1,600.7	2.9	2,329.0	3.7	
14591 01						
14592 01	Prepared common clay and shale, total.....	6,436.8	33.2	4,661.0	26.6	
	Prepared in the clay, ceramic, and related minerals, n.e.c., industry...			4,629.0	23.0	
	Prepared in other industries.....			32.0	3.7	
	Other clay, ceramic, and refractory minerals:					
14591 03	Crude.....	206.6	1.5	⁵ 402.0	⁵ 12.7	
14592 03	Prepared.....	1,119.3	17.6			
14593 01	Magnesite and brucite.....					
	MIDDLE ATLANTIC					
14590 01	Crude common clay and shale.....	453.9	1.0	231.0	0.5	
14591 01						
	EAST NORTH CENTRAL					
14590 01	Crude common clay and shale.....	673.9	1.1	337.0	0.4	
14591 01						
14592 01	Prepared common clay and shale.....	1,383.5	7.4	1,193.0	5.6	
	WEST NORTH CENTRAL					
14590 01	Crude common clay and shale.....	168.4	0.3	115.0	0.2	
14591 01						
14592 01	Prepared common clay and shale.....	612.2	3.0	487.0	2.1	

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	1967		1963	
		Quantity	Value	Quantity	Value
		(1,000 short tons)	(million dollars)	(1,000 short tons)	(million dollars)
1459- --	CLAY AND RELATED MINERALS, N.E.C.--Con.				
	SOUTH ATLANTIC				
14592 01	Prepared common clay and shale.....	811.5	3.1	438.0	2.4
	Other clay, ceramic, and refractory minerals:				
14591 03	Crude.....	40.5	0.5	(NA)	(NA)
14592 03	Prepared.....	451.0	6.3	(NA)	(NA)
	EAST SOUTH CENTRAL				
14590 01	Crude common clay and shale.....	107.4	0.2	229.0	0.4
14592 01	Prepared common clay and shale.....	675.4	3.7	401.0	1.9
	WEST SOUTH CENTRAL				
14592 01	Prepared common clay and shale.....	1,215.8	6.9	855.0	4.7
	PACIFIC				
14590 01	Crude common clay and shale.....	14.8	(Z)	488.0	0.5
14591 01	Crude common clay and shale.....				
14592 01	Prepared common clay and shale.....	1,011.8	5.2	468.0	5.9
14592 01	California, prepared common clay and shale.....	748.2	4.2	403.0	0.5

Note: Detail may not add to the total due to independent rounding.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure of individual company data. (NA) Not available.
(X) Not applicable. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.¹Represents gross shipments less receipts from other establishments of crude materials for preparation.²Represents quantity of crude fire clay mined and used at establishments classified in the manufacturing industries. For 1967, excludes such establishments with less than 10 employees which in 1963 accounted for over 30 percent of this quantity.³Includes figures for Pennsylvania.⁴Represents the production of crude common clay and shale by establishments classified in manufacturing industries. In 1967, establishments with less than 10 employees, which accounted for approximately 20 to 30 percent of the production reported in the manufacturing industries, were excluded.⁵Represents aplite, kyanite, magnesite, and olivine.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
	<u>Part I - Geographic Area</u>		INDUSTRY 1452.--BENTONITE				
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	6.1	(X)	¹ 6.2	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.4	(X)	¹ 5.5	
145091	Minerals for preparation:						
	Mined and prepared at the same establishment.....	1,000 short tons	2,207.7	(X)	1,874.0	(²)	
	Received from other establishments.....	do.....	-	-			
353011	Purchased machinery installed.....		(X)	0.6	(X)	1.1	
	Supplies used:						
970099	All other supplies used.....		(X)	4.7	(X)	¹ 24.3	
974000	Undistributed supplies ³						
	Fuels used, total.....		(X)	0.8	(X)	0.7	
	Fuel oil:						
291141	Distillate.....	1,000 lbs.....	22.9	0.1	16.0	0.7	
291151	Residual.....	do.....	16.7	0.1	74.0		
131300	Gas.....	Million cu. ft..	1,609.5	0.5	1,308.0		
291111	Gasoline.....	1,000 gallons...	184.0	(Z)	141.0		
977000	Undistributed fuels ³		(X)	(Z)	(X)		
	WEST REGION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	4.2	(X)	(NA)	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	3.8	(X)	(NA)	
145091	Minerals mined and prepared at the same establishment.....	1,000 short tons	1,497.5	(X)	1,112.0	(X)	
353011	Purchased machinery installed.....		(X)	0.5	(X)	(NA)	
	Supplies used:						
970099	All other supplies.....		(X)	3.3	(X)	(NA)	
974000	Undistributed supplies ³						
	Fuels used, total.....		(X)	0.4	(X)	(NA)	
	Fuel oil:						
291141	Distillate.....	1,000 barrels...	16.0	0.1	(X)	(NA)	
291151	Residual.....	do.....					
131300	Gas.....	Million cu. ft..	826.0	0.3			
291111	Gasoline.....		(X)	0.1			
977000	Undistributed fuels ³						
	<u>Type of Operation</u>						
	Producing mines with preparation plants:						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	5.7	(X)	¹ 6.0	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	5.0	(X)	¹ 5.3	
145091	Minerals for preparation:						
	Mined and prepared at the same establishment.....	1,000 short tons	2,207.7	(X)	1,874.0	(²)	
	Received from other establishments.....	do.....	-	-			
353011	Purchased machinery installed.....		(X)	0.5	(X)	1.1	
	Supplies used:						
970099	All other supplies.....		(X)	4.4	(X)	¹ 24.2	
974000	Undistributed supplies ³		-	-			

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963				
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)			
	Type of Operation--Con.		INDUSTRY 1452.--BENTONITE--Con.						
	Producing mines with preparation plants--Con.								
	Fuels used, total.....		(X)	0.7	(X)	0.7			
291141	Fuel oil:								
291151	Distillate.....	1,000 barrels...	25.1	0.1	15.0	50.0			
	Residual.....	do.....			50.0				
131300	Gas.....	Million cu. ft..	1,603.5	0.5	426.0	0.7			
291111	Gasoline.....	1,000 gallons...	119.0	(Z)	57.0				
977000	Undistributed fuels ³		(X)	(Z)	(X)				
	Part I - Geographic Area		INDUSTRY 1453.--FIRE CLAY						
	UNITED STATES								
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	4.6	(X)	5.3			
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	3.9	(X)	4.7			
145091	Minerals for preparation:								
	Mined and prepared at the same establishment.....	1,000 short tons	761.5	(X)	681.0	(X)			
	Received from other establishments.....	do.....	-	-	32.0	0.1			
353011	Purchased machinery installed.....		(X)	0.8	(X)	2.0			
	Supplies used:								
28921-	Explosive materials and blasting accessories.....		(X)	0.2	}	2.6			
331201	Steel mill shapes and forms.....	1,000 short tons	(X)	2.9					
970099	All other supplies.....			(X)	(X)				
974000	Undistributed supplies ³		}	(X)	}	0.6			
	Fuels used, total.....						(X)	0.7	(X)
	Fuel oil:								
291141	Distillate.....	1,000 barrels...	99.4	0.3	10.0	5.0			
291151	Residual.....	do.....			5.0				
131300	Gas.....	Million cu. ft..	107.3	(Z)	30.0	0.6			
291111	Gasoline.....	1,000 gallons...	522.0	0.1	258.0				
960018	Other fuels.....		(X)	(Z)	(X)				
977000	Undistributed fuels ³		(X)	0.2	(X)				
	MIDDLE ATLANTIC DIVISION								
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	0.9	(X)	(NA)			
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	0.7	(X)	(NA)			
145091	Minerals mined and prepared at the same establishment.....	1,000 short tons	69.4	(X)	105.0	(X)			
353011	Purchased machinery installed.....	do.....	(X)	0.1	(X)	(NA)			
	Supplies used:								
970099	All other supplies.....		}	0.6	(X)	(NA)			
974000	Undistributed supplies ³						(X)	0.2	(X)
	Fuels used, total.....		(X)	0.2	(X)	(NA)			
960018	Other fuels.....		}	0.2	(X)	(NA)			
977000	Undistributed fuels ³						(X)		

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1453.--FIRE CLAY--Con.			
	<u>Type of Operation</u>					
	Open pit mines only:					
	Selected supplies, minerals received for preparation, purchased machinery installed and fuels used, total.....		(X)	2.4	(X)	2.6
	Selected supplies, minerals received for preparation, and pruchased machinery installed, total.....		(X)	2.0	(X)	2.3
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.8
	Supplies used:					
28921-	Explosive materials and blasting accessories.....		}	1.7	(X)	1.5
331201	Steel mill shapes and forms.....					
970099	All other supplies.....					
974000	Undistributed supplies ³					
	Fuel used, total.....		(X)	0.3	(X)	0.3
	Fuel oil:					
291141	Distillate.....	1,000 barrels..	}	17.3	0.1	{
291151	Residual.....	..do.....				
						3.0
						-
291111	Gasoline.....	1,000 gallons..	405.0	0.1	130.0	}
960018	Other fuels.....		(X)	0.2	(X)	
977000	Undistributed fuels ³		(X)		(X)	
						0.3
			INDUSTRY 1454.--FULLER'S EARTH			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation purchased machinery installed, and fuels used, total.....		(X)	9.6	(X)	¹ 4.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	7.8	(X)	¹ 3.3
145091	Minerals mined and prepared at the same establishment.....	1,000 short tons.....	1,257.5	(X)	777.0	(X)
353011	Purchased machinery installed.....		(X)	4.5	(X)	0.8
	Supplies used:					
289212	Ammonium nitrate.....		}	3.3	(X)	¹ 2.5
331201	Steel mill shapes and forms.....					
970099	All other supplies.....					
974000	Undistributed supplies ³					
	Fuels used, total.....		(X)	1.8	(X)	1.0
	Fuel oil:					
291141	Distillate.....	1,000 barrels..	}	50.7	0.2	{
291151	Residual.....	..do.....				
						19.0
						29.0
131300	Gas.....	Million cu. ft.	3,258.9	1.4	2,021.0	}
291111	Gasoline.....	1,000 gallons..			204.0	
260018	Other fuels.....		(X)	0.2	(X)	
977000	Undistributed fuels ³				(X)	
						1.0
			INDUSTRY 1455.--KAOLIN AND BALL CLAY			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed; and fuels used, total.....		(X)	28.7	(X)	¹ 18.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	25.1	(X)	¹ 15.7
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons.....	5,862.3	(X)	4,923.0	{
	Received for preparation.....	..do.....	43.7	0.2		
353011	Purchased machinery installed.....		(X)	10.1	(X)	(X)
						²
						3.8

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1455.--KAOLIN AND BALL CLAY--Con.			
	<u>Geographic Area--Continued</u>					
	UNITED STATES--Continued					
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	355.6 { (X) (X) (X)	0.1 {	(X)	¹ 211.9
289212	Ammonium nitrate.....	do.....				
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....			14.8		
974000	Undistributed supplies ³		(X)			
	Fuels used, total.....		(X)	3.6	(X)	3.2
	Fuel oil:					
291141	Distillate.....	1,000 barrels....	71.5	0.3	100.0	3.2
291151	Residual.....	do.....	32.8	0.1	74.0	
131300	Gas.....	Million cu. ft..	6,657.0	2.5	6,296.0	
291111	Gasoline.....	1,000 gallons....	836.0	0.2	933.0	
960018	Other fuels.....		(X)	0.5 {	(X)	(X)
977000	Undistributed fuels ³				(X)	
	GEORGIA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	22.3	(X)	¹ 13.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	19.6	(X)	11.1
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons.	4,552.8 {	(X) (2)	3,718.0 {	(X) (2)
	Received for preparation.....	do.....				
353011	Purchased machinery installed.....		(X)	9.2	(X)	2.8
	Supplies used:					
331201	Steel mill shapes and forms.....		(X)	² 10.4	(X)	¹ 28.3
970099	All other supplies.....					
974000	Undistributed supplies ³					
	Fuels used, total.....		(X)	2.7	(X)	2.4
	Fuel oil:					
291141	Distillate.....	1,000 barrels....	74.8	0.3 {	78.0	2.4
291151	Residual.....	do.....			69.0	
131300	Gas.....	Million cu. ft..	6,125.1	2.3	4,514.0	
291111	Gasoline.....	1,000 gallons....	346.0	0.1	347.0	
960018	Other fuels.....		(X)	0.1 {	(X)	(X)
977000	Undistributed fuels ³				(X)	
	EAST SOUTH CENTRAL AND WEST SOUTH CENTRAL DIVISIONS					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.3	(X)	¹ 2.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.9	(X)	¹ 1.8
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	703.8 {	(X) (2)	589.0 {	(X) (2)
	Received for preparation.....	do.....				
353011	Purchased machinery installed.....		(X)	0.5	(X)	0.3

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963				
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)			
			INDUSTRY 1455.--KAOLIN AND BALL CLAY--Con.						
	EAST SOUTH CENTRAL AND WEST SOUTH CENTRAL DIVISIONS--Continued								
970099	Supplies used: All other supplies.....	}	(X)	² 1.4	(X)	¹ 21.5		
974000	Undistributed supplies ³.....	.....						
	Fuels used, total.....	.....	(X)	0.4	(X)	0.3		
131300	Gas.....	Million cu. ft..	249.8	0.1	1,067.0	}	0.3		
291111	Gasoline.....	1,000 gallons...	267.0	0.1	345.0				
960018	Other fuels.....	.....	(X)	0.2	(X)			
977000	Undistributed fuels ³.....	.....			(X)			
	Type of Operation								
	Producing open pit mines with preparation plants:								
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	27.3	(X)	¹ 18.5		
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	23.9	(X)	¹ 15.3		
145091	Minerals for preparation: Mined and prepared at the same establishment.....	1,000 short tons	}	5,792.3	{	(X) (²)	{	(X) (²)	
	Received for preparation.....	do.....							
353011	Purchased machinery installed.....	.....	(X)	9.8	(X)	3.7		
331201	Supplies used: Steel mill shapes and forms.....	}	(X)	² 14.2	(X)	¹ 211.6		
970099	All other supplies.....	.....						
974000	Undistributed supplies ³.....	.....	(X)	3.4	(X)	3.2		
	Fuels used, total.....	.....	(X)	3.4	(X)	3.2		
291141	Fuel oil: Distillate.....	1,000 barrels...	}	91.3	0.4	{	100.0	}	3.2
291151	Residual.....	do.....								71.0
131300	Gas.....	Million cu. ft..	6,657.0	2.5	6,269.0				
291111	Gasoline.....	1,000 gallons...	772.0	0.2	864.0				
960018	Other fuels.....	(X)	0.4	{	(X)	(X)		
977000	Undistributed fuels ³						(X)	
			INDUSTRY 1456.--FELDSPAR						
	Geographic Area								
	UNITED STATES								
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	2.4	(X)	3.0		
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	2.0	(X)	2.7		
145091	Minerals for preparation: Mined and prepared at the same establishment.....	1,000 short tons	}	1,197.2	{	(X) (²)	{	(X) (²)	
	Received for preparation.....	do.....							
353011	Purchased machinery installed.....	.....	(X)	0.3	(X)	0.7		
28921-	Supplies used: Explosive materials and blasting accessories.....	}	(X)	² 1.6	(X)	² 1.9		
331201	Steel mill shapes and forms.....	.....						
970099	All other supplies.....	.....						
974000	Undistributed supplies ³.....	.....	(X)	3.4	(X)	3.2		

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
	<u>Geographic Area--Continued</u> UNITED STATES--Continued		INDUSTRY 1456.--FELDSPAR--Con.			
	Fuels used, total.....	.....	(X)	0.4	(X)	0.3
291141	Fuel oil: Distillate.....	1,000 barrels...	}	(X) 0.4	{ 56.0 37.0 153.0 (X) (X)	{ 0.3
131300	Gas.....	Million cu. ft..				
291111	Gasoline.....	1,000 gallons...				
960018	Other fuels.....	.....			
977000	Undistributed fuels ³.....	.....			
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	1.7	(X)	(NA)
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	1.5	(X)	(NA)
145091	Minerals mined and prepared at the same establishment.....	1,000 short tons	906.5	(X)	{	{
353011	Purchased machinery installed.....	.....	(X)	0.2		
28921-	Supplies used:					
331201	Explosive materials and blasting accessories.....	.....			
970099	Steel mill shapes and forms.....	.....	}	(X)	{	(NA)
	All other supplies.....	.....			
974000	Undistributed supplies ³.....	.....	(X)	1.3		
	Fuels used, total.....	.....	(X)	0.3	(X)	(NA)
291141	Fuel oil: Distillate.....	.....	49.6	0.2	{	(X)
960018	Other fuels.....	.....	(X)	(Z)		
977000	Undistributed fuels ³.....	.....			
	<u>Type of Operation</u>					
	Producing open pit mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	2.3	(X)	2.7
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	1.9	(X)	2.4
14509	Minerals for preparation:		{	1,197.2 {	{	{
	Mined and prepared at the same establishment.....	1,000 short tons				
	Received for preparation.....	do.....				
353011	Purchased machinery installed.....	.....	(X)	0.3	(X)	0.5
28921-	Supplies used:		}	(X)	(X)	21.9
331201	Explosive materials and blasting accessories.....	.....			
970099	Steel mill shapes and forms.....	.....			
	All other supplies.....	.....			
974000	Undistributed supplies ³.....	.....			
	Fuels used, total.....	.....	(X)	0.4	(X)	0.3
291141	Fuel oil: Distillate.....	1,000 barrels...	}	(X)	{	{
131300	Gas.....	Million cu. ft..				
291111	Gasoline.....	1,000 gallons...				
960018	Other fuels.....	.....			
977000	Undistributed fuels ³.....	.....			

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	20.5	(X)	¹ 14.7
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	13.2	(X)	¹ 9.2
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	8,673.6	(X)	5,892.0	(X)
	Received from other establishments.....	...do.....		(²)	(NA)	(Z)
353011	Purchased machinery installed.....		(X)	4.6	(X)	2.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	302.7	0.1	}	(X)
289212	Ammonium nitrate.....	...do.....	976.2	(Z)		
289214	Blasting accessories.....		(X)	(Z)		
331201	Steel mill shapes and forms.....		(NA)	0.5		
970099	All other supplies.....					
			(X)	² 8.0		¹ 6.5
974000	Undistributed supplies ³					
	Fuels used, total.....		(X)	7.3	(X)	5.6
121005	Coal.....	1,000 short tons	218.1	1.4	81.0	}
	Fuel oil:					
291141	Distillate.....	1,000 barrels...	289.0	1.0	331.0	
291151	Residual.....	...do.....			131.0	
131300	Gas.....	Million cu. ft..	10,344.0	3.4	7,420.0	
291111	Gasoline.....	1,000 gallons...	384.0	0.1	1,747.0	}
960018	Other fuels.....				(X)	
977000	Undistributed fuels ³		(X)	1.3	(X)	
	EAST NORTH CENTRAL DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	5.0	(X)	2.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	3.7	(X)	1.4
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	1,121.5	(X)	1,482.0	(X)
	Received from other establishments.....	...do.....		(²)	-	-
353011	Purchased machinery installed.....		(X)	(⁴)	(X)	0.5
	Supplies used:					
970099	All other supplies.....					
			(X)	² 43.7	(X)	0.8
974000	Undistributed supplies ³					
	Fuels used, total.....		(X)	1.2	(X)	0.9
960018	Other fuels.....					
977000	Undistributed fuels ³		(X)	1.2	(X)	0.9
	SOUTH ATLANTIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.0	(X)	3.0
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.1	(X)	2.3
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	2,071.8	(X)	510.0	(X)
	Received from other establishments.....	...do.....	-	-	(NA)	(NA)
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.7

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.--Con.			
	SOUTH ATLANTIC DIVISION--Continued					
331201	Supplies used:					
970099	Steel mill shapes and forms.....	.....	(NA)	0.3	}	(X)
	All other supplies.....	.....			
974000	Undistributed supplies ³.....	.....	(X)	1.5		1.6
	Fuels used, total.....	.....	(X)	1.0	(X)	0.7
121005	Coal.....	1,000 short tons	75.0	0.5	20.0	}
291141	Fuel oil:					
	Distillate.....	1,000 barrels...	54.6	0.2	37.0	
131300	Gas.....	Million cu. ft..	(X)	(Z)	841.0	
291111	Gasoline.....	1,000 gallons...			236.0	
960018	Other fuels.....	.....	(X)	0.2	(X)	
977000	Undistributed fuels ³.....	.....			(X)	
	WEST REGION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	4.8	(X)	4.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	3.0	(X)	2.7
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	1,736.7	{	(X)	(X)
	Received from other establishments.....	do.....			(²)	921.0
353011	Purchased machinery installed.....	.....	(X)	0.6	(X)	0.5
	Supplies used:					
970099	All other supplies.....	.....	(X)	2.4	(X)	1.9
974000	Undistributed supplies ³.....	.....			
	Fuels used, total.....	.....			
			(X)	1.8	(X)	1.7
131300	Gas.....	.....	(X)	1.8	(X)	1.7
960018	Other fuels.....	.....			
977000	Undistributed fuels ³.....	.....			
	Type of operation					
	Producing mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....	.....	(X)	19.2	(X)	14.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....	.....	(X)	12.2	(X)	8.8
145091	Minerals for preparation:					
	Mined and prepared at the same establishment.....	1,000 short tons	8,673.6	{	(X)	(X)
	Received from other establishments.....	do.....			(²)	5,892.0
353011	Purchased machinery installed.....	.....	(X)	4.4	(X)	2.5
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds...	225.3	}	0.1	
289212	Ammonium nitrate.....	do.....	538.5			
289214	Blasting accessories.....	.....	(X)	{	0.5	(X)
331201	Steel mill shapes and forms.....	.....	(NA)			
970099	All other supplies.....	.....	(X)	27.1	(X)	6.3
974000	Undistributed supplies ³.....	.....			
	Fuels used, total.....	.....			
			(X)	7.1	(X)	5.3
121005	Coal.....	1,000 short tons	218.1	1.4	81.0	}
	Fuel oil:					
291141	Distillate.....	1,000 barrels...	279.6	0.9	329.0	
291151	Residual.....	do.....			(X)	
131300	Gas.....	Million cu. ft..	10,319.6	3.4	7,419.0	
291111	Gasoline.....	1,000 gallons...	355.0	0.1	1,660.0	
960018	Other fuels.....	.....	(X)	1.1	(X)	
977000	Undistributed fuels ³.....	.....			(X)	(X)

Note: Detail may not add to the total because of independent rounding.

Standard notes: - Represents zero. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

¹Includes the cost of products bought and resold without further processing.²The cost of minerals received for preparation is included with the cost of all other supplies.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

1967 CENSUS OF Mineral Industries



MIC67(1)-14D

INDUSTRY SERIES

CHEMICAL AND FERTILIZER MINERAL MINING

SIC code	Industry
1472	Barite
1473	Fluorspar
1474	Potash, soda, and borate minerals
1475	Phosphate rock
1476	Rock salt
1477	Sulfur
1479	Chemical and fertilizer mining, n.e.c.

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U.S. DEPARTMENT OF COMMERCE Maurice H. Stans, Secretary
Rocco C. Siciliano, Under Secretary
Harold C. Passer, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS George Hay Brown, Director



Contents

(Page numbers listed here omit the code pretix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	5
2 General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	7
3 Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967 . .	9
4 General Statistics, by Employment Size of Establishment: 1967	12
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	14
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	15
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	18
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

CHEMICAL AND FERTILIZER MINERAL MINING

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 147, Chemical and Fertilizer Mineral Mining. The separate industries included in this group are as follows:

SIC Code and Title

1472--Barite
1473--Fluorspar
1474--Potash, Soda, and Borate Minerals
1475--Phosphate Rock
1476--Rock Salt
1477--Sulfur
1479--Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

Industry 1472--Barite. This industry represents establishments primarily engaged in mining, milling, grinding, or otherwise preparing crude barite. Establishments engaged in grinding barite which do not include a mine are classified in manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

Industry 1473--Fluorspar. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fluorspar.

Industry 1474--Potash, Soda, and Borate Minerals. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt). Products of the industry include potash salts, sodium borates (borax, kernite, ulexite), sodium carbonates (soda ash, trona), sodium sulfates (principally Glauber's salt), and colemanite, a calcium borate. Dry-lake brine operations are included in this industry as well as establishments engaged in producing the specified minerals from underground and open-pit mines.

Industry 1475--Phosphate Rock. This industry represents establishments primarily engaged in mining, milling, drying, or otherwise preparing phosphate rock, including apatite. Establishments primarily engaged in the production of phosphoric acid, superphosphates, or other manufactured phosphate compounds or chemicals are classified in Major Group 28, Chemicals and Allied Products.

Industry 1476--Rock Salt. This industry represents establishments primarily engaged in mining, crushing, and screening rock salt. Establishments primarily engaged in producing salt from natural or artificial brines are classified in manufacturing industry 2899, Chemicals and Chemical Preparations, N.E.C. In 1967, 5.4 million short tons of evaporated salt, valued at \$111.6 million were shipped, mostly by establishments in this manufacturing industry; as compared with 11.7 million short tons, valued at \$81.3 million, of shipments of rock salt, mostly by establishments in the Rock Salt Industry. Another

source of salt is brine produced and sold as such. Separate census statistics for salt from this source are not available since such brine salts are usually produced and consumed by the same manufacturing plant in the production of chemicals and other manufactured products. According to the Bureau of Mines, salt in brine accounts for 56 percent of the total quantity of all kinds of salt sold or used by producers in 1967.

Industry 1477--Sulfur. This industry represents establishments primarily engaged in mining native sulfur, including the extraction of native sulfur at well operations and mining and beneficiating sulfur ore. Establishments primarily engaged in mining, preparing to mine, or concentrating pyrites are classified in industry 1479, Chemical and Fertilizer Mineral Mining, N.E.C. Establishments primarily engaged in recovering elemental sulfur from natural gas are classified in the manufacturing industry 2819, Inorganic Chemicals, N.E.C.

Industry 1479--Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, not elsewhere classified, such as arsenic minerals, guano, lithium minerals, mineral pigments, pyrites, and strontium minerals.

SUMMARY OF FINDINGS

The total value of shipments and receipts of the Chemical and Fertilized Mineral Mining Industries in 1967 was \$910 million, of which primary products of these industries amounted to about \$894 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to about \$16 million. Of the total value of shipments for this group, the Barite Industry accounted for \$20 million; the Fluorspar Industry, \$20 million; the Potash, Soda, and Borate Minerals Industry, \$216 million; the Phosphate Rock Industry, \$297 million; the Rock Salt Industry, \$81 million; the Sulfur Industry, \$271 million; and the Chemical and Fertilizer Mineral Mining, N.E.C., Industry, \$6 million.

These figures represent gross value of shipments and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for preparation. For the group as a whole, the cost of minerals transferred to other establishments for preparation amounted to about \$63 million, or 7 percent of the gross value of shipments of all industries in this group. For the Sulfur Industry, no receipts of minerals for preparation were reported. For the Barite; Fluorspar; Potash, Soda, and Borate Minerals; Rock Salt; and Chemical and Fertilizer Mineral Mining, N.E.C., Industries, transfers of minerals for preparation amounted to less than 5 percent of the gross value of shipments of the industries. For the Phosphate Rock Industry, the cost of minerals transferred for preparation totaled \$52 million, or 6 percent of the gross value of shipments. Separate figures on gross and net shipments are shown in tables 1, 3, and 5 of this report.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the chemical and fertilizer minerals industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are as follows:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used.
2. The Bureau of the Census excludes single unit establishments without paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which the Census Bureau excludes is usually small.
3. Differences exist in coverage in certain areas for both collecting agencies.
4. Census Bureau figures are sometimes reported at a different level of preparation from Bureau of Mines figures. In general, the Census Bureau uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as milling, washing, grinding, or sizing. These factors are the principal explanation for the differences for barite, where the Bureau of Mines figure shown below as crude barite includes some material prepared sufficiently to be marketable, and where Census Bureau figures may include under prepared barite some material which was washed only and which may have been further prepared by another establishment in the same industry.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Pro-duction (quan-tity)	Shipments including interplant transfers		Pro-duction (quan-tity)	Shipments	
			Quan-tity	Value (million dollars)		Quan-tity	Value (million dollars)
Barite:							
Crude barite.....	1,000 short tons	974.0	203.6	2.4	¹ 944.0	(NA)	(NA)
Prepared barite...	...do.....	(NA)	(D)	(D)	1,320.0	² 1,315.0	² 33.0
Net shipments by the barite industry.....	...do.....	(X)	³ 959.6	³ 19.5	(X)	⁴ 962.0	⁴ 11.6
Fluorspar:							
Production and shipments:							
Crude fluorspar...	...do.....	829.4	152.9	1.1	839.0	(NA)	(NA)
Prepared fluorspar.....	...do.....	⁵ 391.3	⁵ 387.5	⁵ 15.5	284.0	(NA)	(NA)
Net shipments...	...do.....	(X)	(⁶)	13.2	(X)	296.0	13.2
Crude fluorspar prepared.....	...do.....	⁵ 1,035.7	(NA)	(NA)	915.0	(NA)	(NA)
Potash, soda, and borate minerals:							
Potassium salts:							
Crude salts.....	...do.....	21,340.0	} ⁷ 5,486.4	⁷ 102.5	{ ⁸ 18,906.0	(NA)	(NA)
Processed or refined salts..	...do.....	5,573.4				(NA)	⁹ 105.3
Sodium carbonates...	...do.....	(NA)	1,754.7	37.1	(NA)	⁴ 1,726.0	⁹ 40.5
Sodium sulfates...	...do.....	(NA)	} 1,554.4	66.7	{ (NA)	⁴ 637.0	⁴ 10.7
Boron compounds...	...do.....	(NA)				⁴ 955.0	⁴ 74.1
Phosphate rock:							
Crude ore or matrix.....	1,000,000 long tons.	114.8	5.3	13.5	129.0	(NA)	(NA)
Washed or concentrated.....	...do.....	30.6	15.4	72.1	36.2	(NA)	(NA)
Dried, calcined, or sintered.....	...do.....	27.2	{ ³ 27.0 ¹⁰ 32.4	{ ³ 208.4 ¹⁰ 240.8	(NA)	(NA)	(NA)
Net shipments.....	...do.....	(X)			(X)	37.8	⁴ 251.2
Rock salt.....	1,000 short tons	(NA)	³ 11,747.8	³ 79.8	(NA)	⁴ 11,661.0	⁴ 72.0
Native sulfur and sulfur ore.....	1,000 long tons.	7,004.1	7,607.3	271.2	7,015.0	7,683.0	251.7
Frasch process sulfur.....	...do.....	} 7,004.1	7,607.3	271.2	{ 7,014.0 0.6	7,682.0	251.7
Sulfur ore.....	...do.....					0.6	(Z)

(NA) Not available. (X) Not applicable. (Z) Less than \$50,000. ¹Represents mine or plant output of primary barite. ²Represents crushed and ground barite sold by producers. ³Represents gross shipments less receipts from other establishments for preparation. ⁴Represents minerals sold or used by producers. ⁵Includes foreign ores prepared in the United States. ⁶Not shown, since a significant tonnage cannot be computed by the only method available: subtraction of minerals received for preparation from the gross tonnage shipped, with both of these tonnages including large quantities of foreign ores. ⁷Represents net shipments obtained from gross shipments of crude and processed or refined by subtracting shipments of crude salts to other establishments for processing or refining. ⁸Represents production of marketable potassium salts and probably includes some marketable crude salts. ⁹Represents value of production. ¹⁰Represents shipments of crude ore or matrix, except to washer or concentrator; washed or concentrated rock, except to drier; and dried, calcined, or sintered rock.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, "Explanation of Terms")

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, minerals received for preparation, fuels purchased electric energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Value of net shipments and receipts	Quantity of primary products ¹	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages							
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000 tons)	(million dollars)
GROUP 147.--CHEMICAL AND FERTILIZER MINERALS															
1967 ²	(NA)	233	130	23.7	188.1	15.9	34.5	113.5	740.8	232.8	67.3	909.7	846.5	(X)	131.3
1963	177	235	106	21.0	137.1	14.6	31.2	85.7	433.3	169.8	33.8	576.9	536.8	(X)	60.0
1958	201	264	102	21.9	120.6	15.9	31.0	78.3	337.3	149.3	23.4	470.7	433.6	(X)	39.3
1954	232	303	110	21.4	98.4	17.1	36.1	72.6	337.1	125.2	23.7	450.8	411.9	(X)	35.3
1939 ³	⁴ 176	⁵ 197	(NA)	12.2	17.3	10.6	21.1	12.2	61.7	⁶ 12.4	(NA)	(NA)	74.1	(X)	(NA)
INDUSTRY 1472.--BARITE															
1967 ²	(NA)	30	10	0.9	4.7	0.8	1.6	3.9	15.3	4.5	1.1	19.6	19.6	959.6	1.2
1963	45	54	13	1.4	6.8	0.9	1.9	3.6	11.1	5.9	0.7	16.7	16.5	832.0	1.1
1958	41	53	8	1.2	5.2	0.8	1.6	2.7	11.3	3.2	0.3	13.8	⁷ 13.4	603.0	1.0
1954	36	44	11	1.1	3.9	1.0	2.4	3.5	14.1	4.0	1.3	18.3	18.3	903.0	1.0
1939	37	⁵ 47	(NA)	0.9	0.8	0.8	1.4	0.6	1.7	⁶ 0.4	(NA)	(NA)	2.1	348.0	(NA)
1929	(NA)	⁵ 44	(NA)	0.9	0.8	0.8	(NA)	0.6	1.5	⁶ 0.3	0.2	(NA)	1.8	272.0	(NA)
1919 ³	(NA)	89	(NA)	1.0	0.9	0.9	(NA)	0.8	1.3	0.3	(NA)	1.6	1.6	(NA)	(NA)
1909	23	⁵ 42	(NA)	0.3	0.1	0.2	(NA)	0.1	0.2	(Z)	(NA)	0.2	0.2	(NA)	(NA)
1902	42	⁵ 49	(NA)	0.4	0.1	⁸ 0.3	(NA)	0.1	0.2	(Z)	(NA)	(NA)	0.2	62.0	(NA)
1889	(NA)	(NA)	(NA)	0.2	0.1	0.2	(NA)	(NA)	0.1	(Z)	(NA)	(NA)	0.1	21.0	(NA)
1880 ⁹	(NA)	⁵ 6	(NA)	0.1	(Z)	(NA)	(NA)	(NA)	(Z)	-	(NA)	(NA)	(Z)	4.0	(NA)
INDUSTRY 1473.--FLUORSPAR															
1967 ²	(NA)	32	9	0.7	4.7	0.6	1.3	3.7	11.0	9.2	0.5	19.6	(D)	829.4	1.1
1963	28	30	7	0.8	4.0	0.7	1.3	3.0	8.9	7.0	0.3	15.8	12.3	595.0	0.3
1958	50	55	11	1.2	5.6	1.0	2.1	4.3	12.7	8.1	0.8	20.0	16.6	836.0	1.6
1954	94	104	15	1.3	4.9	1.0	2.0	3.5	9.9	5.7	0.6	15.5	13.7	656.0	0.7
1939 ³	60	⁵ 61	(NA)	1.4	1.4	1.3	2.6	1.1	2.7	⁶ 0.7	(NA)	(NA)	3.4	306.0	(NA)
1929 ³	(NA)	28	(NA)	1.2	1.4	1.1	(NA)	1.1	2.0	⁶ 0.8	0.1	(NA)	2.9	156.0	(NA)
1919	(NA)	54	(NA)	1.2	1.5	1.1	(NA)	1.2	2.4	0.9	(NA)	3.3	3.3	(NA)	(NA)
1909	16	⁵ 18	(NA)	0.3	0.2	0.3	(NA)	0.2	0.2	0.1	(NA)	0.3	0.3	(NA)	(NA)
1902	18	⁵ 22	(NA)	0.3	0.1	⁸ 0.3	(NA)	0.1	0.2	(Z)	(NA)	(NA)	0.3	49.0	(NA)
1889	(NA)	(NA)	(NA)	0.1	(Z)	0.1	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)	(Z)	10.0	(NA)
INDUSTRY 1474.--POTASH, SODA, AND BORATE MINERALS															
1967 ²	(NA)	33	28	7.9	67.8	5.1	10.7	41.4	187.7	54.4	16.6	215.7	(D)	8,795.5	43.0
1963	19	23	16	7.1	51.9	4.8	9.8	32.9	156.2	51.0	11.8	192.1	(D)	6,870.0	26.8
1958	18	21	14	6.7	41.1	4.6	9.2	26.7	111.1	34.5	6.9	141.1	(D)	¹⁰ 5,544.0	11.4
1954	15	20	13	6.3	33.4	4.7	9.4	23.0	82.2	26.2	8.4	107.8	(D)	4,606.0	9.1
1939 ³	15	⁵ 17	(NA)	2.4	4.8	2.0	4.4	3.4	13.3	⁶ 3.7	(NA)	(NA)	17.0	787.0	(NA)
1902	6	⁵ 6	(NA)	0.2	0.1	⁸ 0.2	(NA)	0.1	2.2	⁶ 0.2	(NA)	(NA)	2.4	19.0	(NA)
INDUSTRY 1475.--PHOSPHATE ROCK															
1967 ²	(NA)	69	41	8.1	59.6	5.4	12.0	35.3	199.3	111.4	33.6	296.6	244.5	32.4	47.7
1963	43	66	39	5.6	32.0	4.0	9.0	20.6	^r 105.1	74.1	14.9	^r 171.9	130.3	20.8	22.2
1958	43	65	37	5.4	27.2	4.0	8.3	17.2	64.4	67.3	6.1	132.1	99.1	15.6	5.7
1954	53	75	39	5.4	21.5	4.6	10.1	17.1	62.1	59.1	8.2	118.0	82.6	13.4	11.3
1939 ³	33	⁵ 40	(NA)	3.8	3.7	3.4	6.7	2.9	9.0	⁶ 3.3	(NA)	(NA)	12.3	4.0	(NA)
1935	(NA)	(NA)	(NA)	2.9	2.5	2.6	(NA)	1.8	8.4	⁶ 3.0	(NA)	(NA)	11.4	(NA)	(NA)
1929	(NA)	26	(NA)	3.5	4.1	3.2	(NA)	3.3	9.5	⁶ 3.5	0.8	(NA)	13.0	3.8	(NA)
1919 ³	(NA)	48	(NA)	4.7	4.7	4.4	(NA)	3.9	6.2	4.1	(NA)	10.3	10.3	2.0	(NA)
1909	56	76	(NA)	8.3	3.8	7.9	(NA)	3.2	8.3	2.5	(NA)	10.8	10.8	(NA)	(NA)
1902	87	⁵ 115	(NA)	6.4	2.3	⁸ 6.0	(NA)	1.9	4.0	⁶ 1.0	(NA)	(NA)	4.9	1.5	(NA)
1889	(NA)	(NA)	(NA)	5.0	1.2	4.9	(NA)	(NA)	2.5	0.4	(NA)	(NA)	2.9	0.6	(NA)
1880	(NA)	21	(NA)	2.5	0.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1.1	0.2	(NA)
INDUSTRY 1476.--ROCK SALT															
1967 ²	(NA)	26	18	2.6	19.3	1.9	4.4	13.0	70.9	12.8	4.9	81.3	(D)	11,747.8	7.3
1963	20	25	15	2.4	16.0	1.8	4.3	11.1	49.5	12.0	5.2	59.3	58.6	¹¹ 8,769.0	7.4
1958	18	22	12	2.0	11.0	1.6	3.5	7.9	34.1	8.2	2.1	41.8	(D)	¹¹ 5,445.0	2.6
1954	11	15	12	1.9	8.6	1.7	3.9	7.1	30.0	6.3	1.5	35.7	35.6	4,618.0	2.2
1939	17	⁵ 17	(NA)	1.6	2.0	1.4	2.6	1.4	5.7	⁶ 1.2	(NA)	(NA)	6.9	2,047.0	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, "Explanation of Terms")

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, minerals received for preparation, fuels purchased electric energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Value of net shipments and receipts	Quantity of primary products ⁴	Capital expenditures
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages							
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000 tons)	(million dollars)
INDUSTRY 1477.--SULFUR															
1967 ²	(NA)	31	21	3.2	30.5	1.8	4.0	15.1	253.2	38.1	10.3	271.2	271.2	7,607.3	30.3
1963	11	17	10	2.6	20.6	1.6	3.3	10.6	100.3	13.0	0.8	113.1	113.1	4,923.0	1.1
1958	14	24	13	3.7	24.6	2.3	4.6	13.3	94.1	21.3	7.1	106.2	106.2	4,619.0	16.3
1954	12	20	13	4.1	21.2	3.1	6.2	14.6	124.2	22.6	2.8	140.7	140.7	5,510.0	8.8
1939 ³	8	⁵ 10	(NA)	2.0	4.5	1.5	3.0	2.5	28.9	⁶ 2.9	(NA)	(NA)	31.8	2,091.0	(NA)
1929 ³ ¹²	(NA)	9	(NA)	2.5	4.4	2.2	(NA)	3.5	29.3	⁶ 7.8	1.6	(NA)	37.1	2,328.0	(NA)
1919 ³	(NA)	4	(NA)	1.3	2.1	1.1	(NA)	1.7	13.7	4.2	(NA)	17.9	17.9	(NA)	(NA)
1909	4	4	(NA)	0.4	0.4	0.4	(NA)	0.3	3.5	1.0	(NA)	4.4	4.4	(NA)	(NA)
1902 ¹²	18	⁵ 23	(NA)	1.0	0.4	⁸ 1.0	(NA)	0.4	0.7	⁶ 0.2	(NA)	(NA)	0.9	196.0	(NA)
INDUSTRY 1479.--CHEMICAL AND FERTILIZER MINING, N.E.C.															
1967 ²	(NA)	12	3	0.3	1.6	0.2	0.4	1.1	3.4	2.3	0.5	5.6	(D)	(X)	0.7
1963	19	20	6	1.1	6.0	0.8	1.6	3.8	12.4	6.8	0.2	18.3	(D)	(X)	1.1
1958	22	24	7	2.0	7.8	1.6	2.6	6.1	9.7	6.6	0.2	15.8	(D)	(X)	0.7
1954	25	27	7	1.3	4.9	1.1	2.1	3.8	14.7	1.4	1.0	15.0	(D)	(X)	2.1
1919 ³	(NA)	40	(NA)	1.5	1.8	1.4	(NA)	1.6	1.9	1.0	(NA)	2.9	2.9	(X)	(NA)
1909 ³	⁴ 34	34	(NA)	1.3	0.5	1.3	(NA)	0.5	0.6	0.3	(NA)	0.8	0.8	(X)	(NA)
1889	(NA)	(NA)	(NA)	0.6	0.2	0.6	(NA)	0.2	0.5	0.2	(NA)	(NA)	0.7	130.0	(NA)
1880	(NA)	⁵ 8	(NA)	0.1	(Z)	(NA)	(NA)	(NA)	¹³ 0.1	(Z)	(NA)	(NA)	¹³ 0.1	(NA)	(NA)

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than \$50 thousand. ¹Revised.¹Represents the product indicated by the name of the industry. For 1967, 1963, 1958, and 1954, in general, represents net shipments; for earlier years, represents net production. For fluorspar, for 1939 to 1967, represents gross production of crude fluorspar. Represents million long tons for phosphate rock and sulfur; for all other products, represents short tons.²In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963, there were approximately 28 establishments without paid employees in industry group 147; however, they accounted for less than 3 percent of the value added for industry group 147. In industry 1472, there were approximately 11 establishments without paid employees; in industries 1473, 1474, 1475, and 1477, approximately 2 establishments in each industry; industry 1476, approximately 3 establishments; and industry 1479, approximately 6 establishments without paid employees. In industry 1472, these establishments accounted for less than 3 percent of value added, while for industries 1473, 1474, 1475, 1476, 1477, and 1479, they accounted for less than 1 percent of value added in each industry.³Excludes nonproducing operations as follows: For 1939, 1 fluorspar mine; 2 mines and 1 preparation plant in the potash, soda, and borate minerals industry; 1 mine and 1 preparation plant in the phosphate rock industry; and 3 sulfur mines; for 1929, 4 fluorspar and 2 sulfur establishments; for 1919, 1 barite, 1 phosphate rock, 1 sulfur, and 1 pyrite establishment; for 1909, 1 pyrite, 1 lithium minerals, and 2 mineral pigments establishments.⁴Represents the sum of the figures shown for the separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry.⁵Represents number of mines.⁶Excludes the cost of minerals received for preparation which amounted for 1954 to \$38,838 thousand for all chemical and fertilizer minerals industries and to \$35,393 thousand for the phosphate rock industry.⁷Represents value of net shipments of primary products only.⁸Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.⁹Only one establishment was reported in the barite industry for 1870 and 1860.¹⁰Includes shipments by industries other than potash, soda, and borate minerals, amounting to less than one percent of the total.¹¹Includes shipments by industries other than rock salt, amounting to less than 10 percent of the total.¹²For 1929 and 1902, figures for the pyrites subindustry (see industry 1479 below) are included with those for the sulfur industry. Only one establishment in the sulfur industry was reported for 1889 and 1880.¹³Excludes figures for 1 pyrite mine.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation ¹	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDUSTRY 1472.--BARITE													
United States, total.....	30	10	0.9	4.7	0.8	1.6	3.9	15.3	5.6	19.6	1.2	1.4	11.1
Geographic Area													
West North Central (Missouri) Division	10	5	0.5	2.0	0.4	0.8	1.8	5.6	2.4	7.7	0.3	0.4	3.8
South Region.....	9	5	0.4	2.3	0.4	0.7	1.9	6.6	2.3	8.4	0.6	1.0	6.4
West Region.....	11	-	(Z)	0.3	(Z)	0.1	0.3	3.0	0.8	3.5	0.3	0.1	0.9
Type of Operation													
Producing establishments, total.....	30	10	0.9	4.7	0.8	1.6	3.9	15.3	5.6	19.6	1.2	1.4	11.1
Open-pit mines with preparation plants	16	8	0.7	3.1	0.6	1.2	2.7	11.3	3.9	14.1	1.1	1.0	6.1
Other producing establishments ²	14	2	0.3	1.5	0.2	0.5	1.2	3.9	1.6	5.5	0.1	0.4	5.0
INDUSTRY 1473.--FLUORSPAR													
United States, total.....	32	9	³ 0.7	³ 4.7	0.6	1.3	3.7	11.0	9.7	19.6	1.1	0.8	8.9
Geographic Area													
Mountain Division.....	9	1	0.1	0.4	0.1	0.1	0.4	1.1	0.4	1.4	0.1	(Z)	0.8
Type of Operation													
Producing establishments, total.....	32	9	³ 0.7	³ 4.7	0.6	1.3	3.7	11.0	9.7	19.6	1.1	0.8	8.9
Open-pits.....	4	-	(Z)	0.1	(Z)	(Z)	0.1	0.5	0.3	0.7	(Z)	(Z)	0.6
Underground mines, total.....	19	6	0.5	3.4	0.5	1.0	3.0	7.3	5.4	11.8	0.9	⁴ 0.6	⁴ 6.4
Mines only.....	12	2	0.1	0.5	0.1	0.2	0.5	0.3	1.0	0.8	0.5	(⁴)	(⁴)
Mines with preparation plants.....	7	4	0.4	2.9	0.4	0.8	2.5	7.0	4.4	11.0	0.4	0.6	6.4
Preparation plants only.....	6	3	0.2	0.9	0.1	0.3	0.6	3.3	4.0	7.1	0.2	⁴ 0.1	⁴ 1.9
INDUSTRY 1474.--POTASH, SODA, AND BORATE MINERALS													
United States, total.....	33	28	7.9	67.8	5.1	10.7	41.4	187.7	71.0	215.7	43.0	7.1	156.2
Geographic Area													
New Mexico.....	8	8	3.6	29.4	2.7	5.5	21.2	67.9	33.5	97.1	4.3	3.5	81.2
Type of Operation													
Producing underground mines with preparation plants.....	12	10	4.6	37.4	3.3	7.0	27.1	93.4	47.5	121.1	19.9	4.1	95.8
Open-pits, brine operations, and non-producing operations.....	21	18	3.3	30.4	1.8	3.7	14.3	94.2	23.5	94.6	23.1	3.0	60.3
INDUSTRY 1475.--PHOSPHATE ROCK													
United States, total.....	69	41	8.1	59.6	5.4	12.0	35.3	199.3	145.0	296.6	47.7	5.6	94.9
Geographic Area													
Northeast and South Regions.....	54	30	⁵ 6.6	⁵ 49.0	4.4	9.9	27.8	177.8	128.6	265.7	40.7	4.7	81.5
Florida.....	31	23	4.8	31.4	3.6	8.1	22.2	152.6	113.1	227.1	38.6	3.2	66.1
West Region.....	15	11	1.4	10.5	1.1	2.1	7.5	21.5	16.4	30.9	7.0	0.9	13.4
Type of Operation													
Producing open-pit mines, total.....	44	27	5.5	37.4	4.2	9.4	27.2	153.0	76.8	198.2	31.6	4.5	70.9
Without preparation plants.....	13	2	0.3	2.2	0.3	0.6	1.8	5.1	3.3	7.6	0.9	0.2	3.2
With preparation plants.....	31	25	5.2	35.2	3.9	8.8	25.4	147.9	73.5	190.7	30.7	4.2	67.7
Other mines and nonproducing establishments.....	11	8	1.8	17.6	0.7	1.3	4.7	10.6	8.0	12.2	6.4	0.7	6.9
Producing preparation plants only.....	14	6	0.7	4.6	0.6	1.4	3.4	35.7	60.2	86.2	9.7	0.5	17.1

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Area and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

(See Appendix, Explanation of Terms)

Industry, geographic area, and type of operation ¹	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	INDUSTRY 1476.--ROCK SALT												
United States, total.....	26	18	2.6	19.3	1.9	4.4	13.0	70.9	17.7	81.3	7.3	2.4	49.5
Geographic Area													
Northeast and North Central Regions....	11	9	1.5	12.2	1.0	2.3	7.4	40.8	9.2	44.4	5.7	1.4	28.5
South and West Regions.....	15	9	1.1	7.1	0.9	2.1	5.6	30.1	8.4	36.9	1.6	1.1	21.0
	INDUSTRY 1477.--SULFUR												
United States, total.....	31	21	3.2	30.5	1.8	4.0	15.1	253.2	48.3	271.2	30.3	2.6	100.3
	INDUSTRY 1479.--CHEMICAL AND FERTILIZER MINING. N.E.C.												
United States, total.....	12	3	0.3	1.6	0.2	0.4	1.1	3.4	2.9	5.6	0.7	1.1	12.4

Note: Detailed figures may not add to totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

¹General statistics for most states are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics.²For 1967, represents data for 1 underground mine with a preparation plant, 1 combination open-pit and underground mine with a preparation plant, and 12 open-pit mines without preparation plants.³Includes data for central offices which were not distributed by type of operation.⁴Figures for underground mines only are included with those for preparation plants only.⁵Include figures for one central office in Illinois.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967

Item	147.- Chemical and fertilizer minerals industries total	1472.-Barite industry					1473.-Fluorspar industry	
		United States, total	West North Central (Missouri)	South	West	Producing open-pit mines with pre- paration plants	United States, total	Mountain
Establishments, total.....number..	233	30	10	9	11	16	32	9
With 1 to 19 employees.....do....	103	20	5	4	11	8	23	8
With 20 to 99 employees.....do....	61	7	3	4	-	6	7	1
With 100 employees or more.....do....	69	3	2	1	-	2	2	-
All employees (average for the year).....1,000..	23.7	0.9	0.5	0.4	(Z)	0.7	0.7	0.1
Payroll (all employees), total for year..million dollars..	188.1	4.7	2.0	2.3	0.3	3.1	4.7	0.4
Production, development, and exploration workers:								
Average for the year.....1,000..	15.9	0.8	0.4	0.4	(Z)	0.6	0.6	0.1
March.....do....	16.3	0.9	0.5	0.4	(Z)	0.6	0.6	0.1
May.....do....	16.0	0.8	0.4	0.4	(Z)	0.6	0.6	0.1
August.....do....	16.3	0.9	0.5	0.4	(Z)	0.7	0.6	0.1
November.....do....	15.2	0.7	0.3	0.4	(Z)	0.5	0.6	0.1
Man-hours.....millions..	34.5	1.6	0.8	0.7	0.1	1.2	1.3	0.1
January-March.....do....	8.8	0.4	0.2	0.2	(Z)	0.3	0.3	(Z)
April-June.....do....	8.5	0.4	0.2	0.2	(Z)	0.3	0.3	(Z)
July-September.....do....	8.7	0.4	0.2	0.2	(Z)	0.3	0.3	(Z)
October-December.....do....	8.7	0.4	0.2	0.2	(Z)	0.3	0.3	(Z)
Wages.....million dollars..	113.5	3.9	1.8	1.9	0.3	2.7	3.7	0.4
Supplemental labor cost not included in payroll.....do....	17.6	0.4	0.1	0.3	(Z)	0.2	0.5	0.1
Legally required expenditures, including Social Security contributions.....do....	7.6	0.3	0.1	0.2	(Z)	0.1	0.3	(Z)
Payments for voluntary programs.....do....	10.0	0.2	(Z)	0.1	(Z)	0.1	0.2	(Z)
Cost of supplies, etc., total.....do....	300.2	5.6	2.4	2.3	0.8	3.9	9.7	0.4
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	217.8	3.2	1.1	1.5	0.5	2.3	7.9	0.2
Cost of resales.....do....	3.4	(Z)	-	(Z)	-	(Z)	(D)	-
Purchased fuels consumed.....do....	30.6	0.3	0.1	0.2	(Z)	0.2	0.6	(Z)
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	2,864.4	47.0	12.6	33.2	1.3	24.2	49.6	2.4
Cost.....million dollars..	21.2	0.6	0.2	0.4	(Z)	0.3	0.7	(Z)
Generated less sold.....million kw.-hrs..	544.0	0.1	-	-	0.1	0.1	3.7	(Z)
Contract work.....million dollars..	27.3	1.5	0.9	0.3	0.3	1.1	(D)	0.1
Value of shipments and receipts (including resales), total.....do....	909.7	19.6	7.7	8.4	3.5	14.1	19.6	1.4
Value of resales.....do....	3.4	(Z)	-	(Z)	-	(Z)	(D)	-
Value added in mining.....do....	740.8	15.3	5.6	6.6	3.0	11.3	11.0	1.1
Capital expenditures (except land and mineral rights), total.....do....	131.3	1.2	0.3	0.6	0.3	1.1	1.1	0.1
Mineral development and exploration.....do....	16.0	(Z)	-	(Z)	-	(Z)	0.1	-
New structures and additions.....do....	34.6	0.2	(Z)	0.2	-	0.2	0.2	(Z)
New machinery and equipment.....do....	80.1	0.7	0.3	0.4	(Z)	0.6	0.7	0.1
Used plant and equipment.....do....	0.7	0.3	(Z)	(Z)	0.3	0.3	(Z)	(Z)
Gross book value of fixed assets, total.....do....	1,120.4	18.2	8.9	7.3	2.0	12.4	13.8	1.7
Mineral properties.....do....	198.2	2.4	1.9	0.3	0.1	2.3	4.0	0.1
Building and other structures (excluding land).....do....	245.0	2.9	1.5	1.2	0.2	1.9	2.7	0.5
Machinery and equipment.....do....	677.1	12.9	5.4	5.8	1.7	8.2	7.1	1.1
Mineral development and exploration expenditures, total.....do....	19.8	0.1	-	0.1	(Z)	(Z)	0.2	0.1
Capitalized.....do....	16.0	(Z)	-	(Z)	-	(Z)	0.1	-
Expensed.....do....	3.9	0.1	-	0.1	(Z)	(Z)	0.1	0.1
Mineral rights and geological expenditures.....do....	5.1	(Z)	(Z)	(Z)	-	(Z)	(Z)	(Z)
Lease and land acquisition of nonproducing acreage.....do....	2.2	-	-	-	-	-	(Z)	-
Geological and geophysical.....do....	0.2	-	-	-	-	-	(Z)	-
Lease rents.....do....	2.8	(Z)	(Z)	(Z)	-	(Z)	(Z)	(Z)
Net shipments of primary product ¹.....1,000 short tons..	(X)	959.6	352.5	387.3	219.7	(NA)	829.4	(NA)
Crude minerals mined during 1967, by ownership.....do....	(X)	1,036.6	349.8	430.7	256.1	(NA)	872.7	(NA)
Production for own account.....do....	(X)	606.4	210.4	302.3	93.6	(NA)	673.1	(NA)
Production for accounts of others.....do....	(X)	-	-	-	-	-	-	(NA)
Royalty production.....do....	(X)	257.5	30.0	101.1	126.4	(NA)	174.3	(NA)
Royalties paid.....million dollars..	(X)	0.2	(Z)	0.1	0.1	(NA)	0.3	(NA)
Undistributed.....1,000 short tons..	(X)	172.7	109.4	27.3	36.0	(NA)	25.3	(NA)
Man-hours worked by production, development, and exploration workers, total.....millions..	34.5	1.6	0.8	0.7	0.1	1.2	1.3	0.1
At mines, total.....do....	22.3	0.9	0.6	0.3	(Z)	0.7	0.7	0.1
Underground.....do....	7.7	0.2	-	0.2	-	-	0.6	(Z)
Open-pit.....do....	8.2	0.7	0.5	0.1	(Z)	0.6	(Z)	(Z)
Surface (including mine shops and yards).....do....	6.4	0.1	0.1	(Z)	-	0.1	0.1	(Z)
At preparation plants.....do....	12.2	0.7	0.3	0.4	(Z)	0.5	0.7	(Z)
Man-hours spent on exploration and development (included above).....do....	0.2	(Z)	-	(Z)	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Con.

Item	1473.-Fluorspar industry-Continued		1474.-Potash, soda, and borate minerals industry			1475.-Phosphate rock industry		
	Producing underground mines with preparation plants	Producing preparation plants only	United States, total	New Mexico	Producing underground mines with preparation plants	United States, total	Northeast and South	
							Total	Florida
Establishments, total.....number..	7	6	33	8	12	69	54	31
With 1 to 19 employees.....do....	3	3	5	-	2	28	24	8
With 20 to 99 employees.....do....	2	3	12	-	-	16	11	7
With 100 employees or more.....do....	2	-	16	8	10	25	19	16
All employees (average for the year).....1,000..	0.4	0.2	7.9	3.6	4.6	8.1	² 6.6	4.8
Payroll (all employees), total for year..million dollars..	2.9	0.9	67.8	29.4	37.4	59.6	² 49.0	31.4
Production, development, and exploration workers:								
Average for the year.....1,000..	0.4	0.1	5.1	2.7	3.3	5.4	4.4	3.6
March.....do....	0.4	0.1	5.5	3.0	3.7	5.5	4.4	3.6
May.....do....	0.4	0.1	5.3	2.8	3.4	5.4	4.4	3.6
August.....do....	0.4	0.1	5.4	2.8	3.5	5.5	4.4	3.6
November.....do....	0.4	0.1	4.3	2.1	2.7	5.5	4.4	3.6
Man-hours.....millions..	0.8	0.3	10.7	5.5	7.0	12.0	9.9	8.1
January-March.....do....	0.2	0.1	2.8	1.5	1.9	3.0	2.5	2.0
April-June.....do....	0.2	0.1	2.7	1.4	1.8	3.0	2.5	2.0
July-September.....do....	0.2	0.1	2.7	1.4	1.8	3.0	2.5	2.0
October-December.....do....	0.2	0.1	2.5	1.2	1.6	3.1	2.5	2.0
Wages.....million dollars..	2.5	0.6	41.4	21.2	27.1	35.3	27.8	22.2
Supplemental labor cost not included in payroll.....do....	0.3	0.1	6.9	3.2	4.8	4.8	3.8	3.0
Legally required expenditures, including Social Security contributions.....do....	0.2	(Z)	3.1	1.5	2.0	2.1	1.6	1.3
Payments for voluntary programs.....do....	0.1	(Z)	3.9	1.6	2.8	2.7	2.2	1.7
Cost of supplies, etc., total.....do....	4.4	4.0	71.0	33.5	47.5	145.0	128.6	113.1
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	3.2	3.7	51.3	25.9	37.8	112.7	102.7	94.2
Cost of resales.....do....	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
Purchased fuels consumed.....do....	0.4	0.2	11.9	2.6	4.3	7.4	6.6	5.2
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	38.0	9.3	626.7	353.5	388.2	1,999.6	1,886.5	1,685.7
Cost.....million dollars..	0.5	0.1	5.6	3.3	3.6	12.6	11.8	10.5
Generated less sold.....million kw.-hrs..	-	3.7	439.5	94.8	216.9	-	-	-
Contract work.....million dollars..	(D)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
Value of shipments and receipts (including resales), total.....do....	11.0	7.1	215.7	97.1	121.1	296.6	265.7	227.1
Value of resales.....do....	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
Value added in mining.....do....	7.0	3.3	187.7	67.9	93.4	199.3	177.8	152.6
Capital expenditures (except land and mineral rights), total.....do....	0.4	0.2	43.0	4.3	20.0	47.7	40.7	38.6
Mineral development and exploration.....do....	(Z)	-	10.9	-	-	3.2	3.0	3.0
New structures and additions.....do....	0.1	(Z)	10.2	1.3	7.7	6.3	4.4	4.3
New machinery and equipment.....do....	0.3	0.2	21.8	3.0	12.1	38.1	33.2	31.3
Used plant and equipment.....do....	(Z)	-	0.1	(Z)	(Z)	0.1	0.1	(Z)
Gross book value of fixed assets, total.....do....	7.8	4.4	457.3	157.2	221.4	381.2	336.0	299.9
Mineral properties.....do....	2.8	1.0	89.3	20.1	18.1	69.7	65.4	64.5
Building and other structures (excluding land).....do....	1.3	1.1	93.9	59.4	63.3	40.1	31.5	28.9
Machinery and equipment.....do....	3.8	2.4	274.0	77.7	140.1	271.4	239.0	206.4
Mineral development and exploration expenditures, total.....do....	0.1	-	12.2	(Z)	0.2	3.9	3.6	3.5
Capitalized.....do....	(Z)	-	10.9	-	-	3.2	3.0	3.0
Expensed.....do....	0.1	-	1.3	(Z)	0.2	0.7	0.6	0.6
Mineral rights and geological expenditures.....do....	(Z)	-	0.5	0.1	0.2	4.4	4.3	3.0
Lease and land acquisition of nonproducing acreage.....do....	(Z)	-	0.1	-	-	1.8	1.8	0.6
Geological and geophysical.....do....	(Z)	-	-	-	-	0.1	0.1	0.1
Lease rents.....do....	(Z)	-	0.3	0.1	0.2	2.4	2.3	2.3
Net shipments of primary product ¹.....1,000 short tons..	(NA)	(NA)	8,795.5	(NA)	(NA)	32.4	28.3	24.9
Crude minerals mined during 1967, by ownership.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	114.8	109.8	99.9
Production for own account.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	73.3	72.5	64.9
Production for accounts of others.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	71.7	1.7	1.1
Royalty production.....do....	(NA)	(NA)	(NA)	(NA)	(NA)	16.0	13.3	12.2
Royalties paid.....million dollars..	(NA)	(NA)	6.3	(NA)	(NA)	3.7	2.9	2.5
Undistributed.....1,000 short tons..	(NA)	(NA)	(NA)	(NA)	(NA)	23.8	22.3	21.6
Man-hours worked by production, development, and exploration workers, total.....millions..	0.8	0.3	10.7	5.5	7.0	12.0	9.9	8.1
At mines, total.....do....	0.5	-	5.8	4.0	5.0	7.8	6.2	5.1
Underground.....do....	0.4	-	4.4	3.6	4.2	0.9	-	-
Open-pit.....do....	-	-	0.5	(Z)	(Z)	3.9	3.4	2.8
Surface (including mine shops and yards).....do....	0.1	-	0.9	0.4	0.8	3.1	2.7	2.3
At preparation plants.....do....	0.4	0.3	4.9	1.4	2.0	4.2	3.7	3.0
Man-hours spent on exploration and development (included above).....do....	(Z)	-	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	1475.—Phosphate rock industry--Continued				1476.—Rock salt industry			1477.—Sulfur industry	1479.—Chemical and fertilizer mining n.e.c., industry
	West	Producing open-pit mines		Producing preparation plants only	United States, total	Northeast and North Central	South and West		
		Without preparation plants	With preparation plants						
Establishments, total.....number..	15	13	31	14	26	11	15	31	12
With 1 to 19 employees.....do....	4	11	5	8	8	2	6	10	9
With 20 to 99 employees.....do....	5	1	9	3	9	3	6	8	2
With 100 employees or more.....do....	6	1	16	3	9	6	3	13	1
All employees (average for the year).....1,000..	1.4	0.3	5.2	0.7	2.6	1.5	1.1	3.2	0.3
Payroll (all employees), total for year..million dollars..	10.5	2.2	35.2	4.6	19.3	12.2	7.1	30.5	1.6
Production, development, and exploration workers:									
Average for the year.....1,000..	1.1	0.3	3.9	0.6	1.9	1.0	0.9	1.8	0.2
March.....do....	1.1	0.3	4.0	0.6	1.9	1.0	0.9	1.8	0.2
May.....do....	1.0	0.3	3.9	0.6	1.8	0.9	0.9	1.9	0.2
August.....do....	1.1	0.3	3.9	0.6	1.9	1.0	0.9	1.9	0.2
November.....do....	1.1	0.3	3.8	0.6	2.0	1.1	0.9	1.9	0.2
Man-hours.....millions..	2.1	0.6	8.8	1.4	4.4	2.3	2.1	4.0	0.4
January-March.....do....	0.5	0.1	2.2	0.3	1.2	0.7	0.5	1.0	0.1
April-June.....do....	0.5	0.2	2.2	0.3	1.0	0.4	0.5	1.0	0.1
July-September.....do....	0.5	0.2	2.2	0.3	1.0	0.5	0.5	1.0	0.1
October-December.....do....	0.6	0.2	2.2	0.3	1.2	0.7	0.6	1.0	0.1
Wages.....million dollars..	7.5	1.8	25.4	3.4	13.0	7.4	5.6	15.1	1.1
Supplemental labor cost not included in payroll.....do....	0.9	0.2	3.5	0.4	1.8	1.0	0.8	3.1	0.2
Legally required expenditures, including Social Security contributions.....do....	0.4	0.1	1.5	0.2	1.0	0.5	0.4	0.9	0.1
Payments for voluntary programs.....do....	0.5	0.1	2.0	0.2	0.8	0.5	0.4	2.2	0.1
Cost of supplies, etc., total.....do....	16.4	3.3	73.5	60.2	17.7	9.2	8.4	48.3	2.9
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	10.0	2.1	49.5	54.3	14.2	7.3	6.9	26.3	2.2
Cost of resales.....do....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
Purchased fuels consumed.....do....	0.8	0.4	4.6	2.3	0.8	0.3	0.5	9.4	0.2
Electric energy:									
Purchased:									
Quantity.....million kw.-hrs..	113.2	2.1	1,520.0	95.8	100.5	62.6	37.9	22.2	18.8
Cost.....million dollars..	0.8	(Z)	11.1	0.9	1.2	0.8	0.4	0.2	0.3
Generated less sold.....million kw.-hrs..	-	-	-	-	14.1	-	14.1	86.7	-
Contract work.....million dollars..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	12.4	(D)
Value of shipments and receipts (including resales), total.....do....	30.9	7.6	190.7	86.2	81.3	44.4	36.9	271.2	5.6
Value of resales.....do....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
Value added in mining.....do....	21.5	5.1	147.9	35.7	70.9	40.8	30.1	253.2	3.4
Capital expenditures (except land and mineral rights), total.....do....	7.0	0.9	30.7	9.7	7.3	5.7	1.6	30.3	0.7
Mineral development and exploration.....do....	0.2	-	2.4	0.8	0.1	0.1	-	1.7	-
New structures and additions.....do....	1.9	(Z)	2.0	2.2	1.5	1.4	0.1	16.2	(Z)
New machinery and equipment.....do....	4.9	0.8	26.3	6.7	5.6	4.2	1.5	12.5	0.7
Used plant and equipment.....do....	(Z)	0.1	(Z)	-	0.1	0.1	(Z)	0.1	(Z)
Gross book value of fixed assets, total.....do....	45.2	4.5	288.4	58.9	91.4	62.8	28.6	151.6	6.9
Mineral properties.....do....	4.2	(Z)	59.8	1.0	15.1	6.9	8.3	17.4	0.3
Building and other structures (excluding land).....do....	8.6	0.2	17.3	14.6	20.5	15.8	4.7	83.7	1.1
Machinery and equipment.....do....	32.4	4.2	211.3	43.3	55.7	40.1	15.7	50.5	5.5
Mineral development and exploration expenditures, total.....do....	0.4	-	3.1	0.8	(Z)	(Z)	(Z)	3.3	0.1
Capitalized.....do....	0.2	-	2.4	0.8	(Z)	(Z)	-	1.7	-
Expensed.....do....	0.1	-	0.6	(Z)	(Z)	-	(Z)	1.6	0.1
Mineral rights and geological expenditures.....do....	0.1	(Z)	4.2	0.1	(Z)	-	(Z)	0.2	(Z)
Lease and land acquisition of nonproducing acreage.....do....	(Z)	(Z)	1.8	(Z)	-	-	-	0.2	-
Geological and geophysical.....do....	-	-	0.1	-	-	-	-	(Z)	-
Lease rents.....do....	0.1	(Z)	2.3	0.1	(Z)	-	(Z)	(Z)	(Z)
Net shipments of primary product ¹.....1,000 short tons..	4.0	(NA)	(NA)	(NA)	11,747.8	6,802.9	4,944.9	7,607.3	(X)
Crude minerals mined during 1967, by ownership.....do....	5.0	(D)	(D)	(D)	11,427.7	6,688.5	4,739.2	7,005.7	(NA)
Production for own account.....do....	0.8	(D)	70.6	-	5,528.1	3,495.8	2,032.3	117.3	(NA)
Production for accounts of others.....do....	-	-	(D)	-	-	-	-	-	(NA)
Royalty production.....do....	2.7	(D)	(D)	(D)	4,580.3	(³)	(³)	6,888.3	(NA)
Royalties paid.....million dollars..	1.5	-	(NA)	-	0.5	(D)	(D)	18.8	(NA)
Undistributed.....1,000 short tons..	0.8	(D)	(D)	(D)	1,319.3	³ 3,192.7	³ 2,706.9	-	(NA)
Man-hours worked by production, development, and exploration workers, total.....millions..	2.1	0.6	8.8	1.4	4.4	2.3	2.1	4.0	0.4
At mines, total.....do....	1.6	0.6	6.0	-	3.0	1.9	1.1	3.9	0.2
Underground.....do....	0.9	-	-	-	1.7	1.2	0.5	-	(Z)
Open-pit.....do....	0.4	0.5	3.3	-	0.1	(Z)	0.1	2.8	0.1
Surface (including mine shops and yards).....do....	0.3	0.1	2.9	-	1.1	0.7	0.4	1.0	0.1
At preparation plants.....do....	0.5	-	2.6	1.4	1.5	0.4	1.0	0.1	0.2
Man-hours spent on exploration and development (included above).....do....	(Z)	(Z)	(Z)	(Z)	(Z)	-	(Z)	0.1	(Z)

Note: Detailed figures may not add to the totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified.

¹Represents the product indicated by the name of the industry, reported in millions of long tons for phosphate rock, thousands of long tons for sulfur, and in thousands of short tons for all other products. In general, represents net shipments. For fluorspar, represents gross production of crude fluorspar.

²Includes figures for one central office in Illinois.

³Royalty production is included with undistributed production.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1472	Barite:										
	Establishments, total.....	30	0.9	4.7	0.8	1.6	3.9	15.3	5.6	19.6	1.2
	Establishments with an average of-										
	0 to 4 employees.....	10	0.1	0.2	0.1	0.1	0.2	2.2	0.9	2.8	0.3
	5 to 9 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	0.1	0.3	0.1	0.1	0.3	1.7	0.4	2.1	(Z)
	20 to 49 employees.....	4	0.1	0.6	0.1	0.2	0.5	1.6	0.6	2.0	0.5
	50 to 99 employees.....	3	0.2	1.2	0.2	0.4	1.0	3.6	1.4	4.7	(D)
	100 to 249 employees.....	3	0.5	2.2	0.4	0.8	1.9	6.2	2.2	8.1	0.3
	Estabs. covered by admin. records ¹	6	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)
1473	Fluorspar:										
	Establishments, total.....	32	0.7	4.7	0.6	1.3	3.7	11.0	9.7	19.6	1.1
	Establishments with an average of-										
	0 to 4 employees.....	15	0.1	0.6	0.1	0.2	0.3	1.2	1.1	2.0	0.2
	5 to 9 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	0.6	4.0	0.6	1.1	3.4	9.9	8.5	17.5	0.9
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	5	(Z)	(Z)	(Z)	(Z)	(Z)	0.3	0.1	0.2	0.1
1474	Potash, soda, and borate minerals:										
	Establishments, total.....	33	7.9	67.8	5.1	10.7	41.4	187.7	71.0	215.7	43.0
	Establishments with an average of-										
	0 to 4 employees.....	4	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(D)
	5 to 9 employees.....	1	1.3	12.7	0.5	1.1	4.0	27.3	18.9	31.3	14.7
	10 to 19 employees.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	6	2.4	18.7	1.5	3.1	11.5	38.0	19.2	47.9	9.3
	250 to 499 employees.....	6	4.3	36.6	3.1	6.5	25.8	122.5	32.9	136.4	19.0
	500 to 999 employees.....	6	4.3	36.6	3.1	6.5	25.8	122.5	32.9	136.4	19.0
	Estabs. covered by admin. records ¹	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1475	Phosphate rock:										
	Establishments, total.....	69	8.1	59.6	5.4	12.0	35.3	199.3	145.0	296.6	47.7
	Establishments with an average of-										
	0 to 4 employees.....	9	(Z)	0.4	(Z)	(Z)	0.4	0.7	0.2	0.5	7.3
	5 to 9 employees.....	7	0.1	0.2	(Z)	0.1	0.2	0.9	0.4	1.2	(D)
	10 to 19 employees.....	12	0.2	1.1	0.1	0.3	0.6	2.5	10.4	6.9	(D)
	20 to 49 employees.....	5	0.2	1.0	0.1	0.3	0.7	8.7	3.0	10.8	(D)
	50 to 99 employees.....	11	0.9	6.1	0.8	1.6	4.9	32.2	32.1	57.2	7.1
	100 to 249 employees.....	16	2.4	17.4	1.9	4.0	12.6	66.4	56.3	111.4	11.3
	250 to 499 employees.....	6	4.4	33.4	2.6	5.8	15.9	88.0	42.5	108.4	22.1
	500 to 999 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1476	Rock salt:										
	Establishments, total.....	26	2.6	19.3	1.9	4.4	13.0	70.9	17.7	81.3	7.3
	Establishments with an average of-										
	0 to 4 employees.....	4	0.3	1.8	0.2	0.3	0.8	6.7	1.3	7.8	0.3
	5 to 9 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	4	0.2	1.7	0.2	0.5	1.4	4.7	1.9	6.0	0.5
	100 to 249 employees.....	5	2.1	15.8	1.6	3.6	10.9	59.4	14.6	67.5	6.6
	250 to 499 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	3	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(Z)

See footnotes at end of table.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967-Continued

(See appendix, Explanation of Terms)

Code	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number	Payroll	Number	Man-hours	Wages				
			(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
1477	Sulfur:										
	Establishments, total.....	31	3.2	30.5	1.8	4.0	15.1	253.2	48.3	271.2	30.3
	Establishments with an average of-										
	0 to 4 employees.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1479	Chemical and fertilizer mining, n.e.c:										
	Establishments, total.....	12	0.3	1.6	0.2	0.4	1.1	3.4	2.9	5.6	0.7
	Establishments with an average of-										
	0 to 4 employees.....	5	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(D)
	5 to 9 employees.....	3	0.3	1.5	0.2	0.4	1.0	3.4	2.9	5.6	(D)
	10 to 19 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. - Represents zero. (X) Not applicable. (NA) Not available. (Z) Represents less than one-half of the unit of measure specified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1472	Barite.....1967..	19.6	(D)	(D)	(D)	(D)	(D)	19.5	(D)
	.....1963..	16.7	(D)	(D)	(D)	(D)	32.0	16.4	15.6
1473	Fluorspar.....1967..	19.6	(D)	(D)	(D)	(D)	16.6	16.6	-
	.....1963..	15.8	13.3	2.1	0.2	0.1	10.0	10.0	(Z)
1474	Potash, soda, and borate minerals.....1967..	215.7	211.0	(D)	-	(D)	206.3	206.3	-
	.....1963..	192.1	(D)	(D)	-	(D)	186.5	186.5	-
1475	Phosphate rock.....1967..	296.6	293.9	(D)	(D)	(D)	240.8	240.8	-
	.....1963..	161.7	161.7	-	-	-	140.6	140.6	-
1476	Rock salt.....1967..	81.3	(D)	(D)	-	(D)	79.8	(D)	(D)
	.....1963..	59.3	54.8	(D)	-	(D)	58.2	(D)	(D)
1477	Sulfur.....1967..	271.2	271.2	-	-	-	271.2	271.2	-
	.....1963..	113.1	113.1	(Z)	-	-	113.1	113.1	-
1479	Chemical and fertilizer mining, n.e.c....1967..	5.6	(D)	(D)	-	(D)	13.3	4.9	8.4
	.....1963..	18.3	11.2	(D)	-	(D)	13.2	10.7	2.5

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (1,000 short tons)	Shipments including interplant transfers		Production (1,000 short tons)	Shipments including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
1472- --	BARITE, TOTAL.....	(X)	(X)	¹ 19.5	(X)	(X)	¹ 16.4
	United States:						
14721 01	Crude barite production and shipments.....	974.0	203.6	2.4	1,088.0	268.0	3.6
	Prepared barite (crushed or ground, including flotation concentrates), total.....	(NA)	(D)	(D)	(NA)	1,147.0	28.4
14722 01	Processed at establishments classified in the barite industry.....	740.4	¹ 756.0	¹ 17.1	571.0	¹ 564.0	¹ 12.8
32950 87	Processed at establishments classified in other mineral industries and in manufacturing industries.....	(NA)	(D)	(D)	(NA)	583.0	15.6
	North Central (Missouri):						
14721 01	Crude barite production and shipments.....	349.8	78.9	1.0	296.0	104.0	1.5
	Prepared barite (crushed or ground, including flotation concentrates):						
14722 01	Processed at establishments classified in the barite industry.	274.6	273.6	6.7	(NA)	204.0	4.6
	South:						
14721 01	Crude barite production and shipments.....	418.4	46.3	0.8	656.0	78.0	1.4
	Prepared barite (crushed or ground, including flotation concentrates), total.....	(NA)	(D)	(D)	(NA)	¹ 851.0	¹ 21.8
14722 01	Processed at establishments classified in the barite industry.	² 465.8	¹ ² 482.4	¹ ² 10.4	¹ ² 327.0	¹ 318.0	¹ 7.4
32950 87	Processed at establishments classified in other mineral industries and in manufacturing industries.....	(NA)	(D)	(D)	(NA)	533.0	14.4
	West:						
14721 01	Crude barite production and shipments.....	205.7	78.4	0.6	136.0	86.0	0.6
	Prepared barite (crushed or ground, including flotation concentrates).....	(NA)	(²)	(²)	(NA)	92.0	2.0
1473- --	FLUORSPAR, TOTAL.....	(X)	(X)	16.0	(X)	(X)	13.4
	United States:						
14731 01	Crude fluorspar: Production and shipments.....	829.4	152.9	1.1	595.0	116.0	0.9
	Prepared fluorspar (crushed or ground, including flotation concentrates):						
14732 01	Production and shipments.....	391.3	387.5	15.5	296.0	293.0	12.5
	North Central:						
	Prepared fluorspar (crushed or ground, including flotation concentrates):						
14732 01	Production and shipments.....	232.5	231.3	10.4	³ 139.0	³ 139.0	³ 7.0
	South:						
	Prepared fluorspar (crushed or ground, including flotation concentrates):						
14732 01	Production and shipments.....	160.9	158.3	5.2	123.0	123.0	4.6
	Mountain:						
	Prepared fluorspar (crushed or ground, including flotation concentrates):						
14732 01	Production and shipments.....				34.0	31.0	0.9
1474- --	POTASH, SODA, AND BORATE MINERALS, TOTAL.....	(X)	(X)	⁴ 206.3	(X)	(X)	⁴ 186.5
	Potassium salts:						
14741 01	Crude salts.....	⁵ 21,340.0	(⁶)	(⁶)	⁵ 16,714.0	(⁶)	(⁶)
14742 01	Processed or refined salts.....	5,573.4	⁴ 5,486.4	⁴ 102.5	4,515.0	⁴ 4,608.0	⁴ 104.2
14743 01	Natural sodium carbonates.....	(NA)	1,754.7	37.1	(NA)	1,107.0	26.6
14743 03	Natural sodium sulfate.....	(NA)			(NA)	432.0	8.8
14744 01	Boron compounds.....	(NA)	1,554.4	66.7	(NA)	723.0	46.9

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (million long tons)	Shipments including interplant transfers		Production (million long tons)	Shipments including interplant transfers	
			Quantity (million long tons)	Value (million dollars)		Quantity (million long tons)	Value (million dollars)
1475- --	PHOSPHATE ROCK.....	(X)	(X)	293.9	(X)	(X)	172.0
	UNITED STATES						
	Production and shipments:						
14751 01	Crude phosphate rock (ore or matrix), total.....	114.8	5.3	13.5	63.4	3.7	10.9
14751 03	Shipped to washer or concentrator.....	(X)	3.0	4.6	(X)	2.5	3.6
14751 05	All other shipments.....	(X)	2.3	8.9	(X)	1.2	7.3
14752 01	Washed or concentrated phosphate rock, total.....	30.6	15.4	72.1	18.0	10.2	^r 44.0
14752 03	Shipped to drier.....	(X)	12.3	48.5	(X)	7.6	27.8
14752 05	All other shipments.....	(X)	3.1	23.6	(X)	2.7	^r 16.2
14752 06	Dried phosphate rock.....	23.6	23.5	169.9	14.3	14.4	^r 89.9
14752 08	Calcined or sintered phosphate rock.....	3.5	3.5	38.5	2.6	2.6	^r 27.2
14752 09	Net shipments of phosphate rock ⁷	(X)	32.4	240.8	(X)	20.8	^r 140.6
	NORTHEAST AND SOUTH						
	Production and shipments:						
14751 01	Crude phosphate rock (ore or matrix).....	109.8	2.9	4.1	60.6	2.7	4.2
14752 01	Washed or concentrated phosphate rock.....				17.3		
14752 06	Dried phosphate rock.....	55.4	40.1	259.0	16.2	25.7	^r 148.6
14752 08	Calcined by sintered phosphate rock.....						
14752 09	Net shipments of phosphate rock ⁷	(X)	28.3	211.6	(X)	18.7	^r 122.4
	Florida:						
	Production and shipments:						
14751 01	Crude phosphate rock (ore or matrix).....	99.9	13.6	56.8	54.4	(Z)	^r 32.6
14752 01	Washed or concentrated phosphate rock.....	26.1			15.3	8.8	
14752 06	Dried phosphate rock.....	23.7	23.6	168.0	15.0	15.0	^r 93.6
14752 08	Calcined phosphate rock.....						
	Net shipments of phosphate rock ⁷	(X)	24.9	176.2	(X)	⁸ 16.4	^r 101.7
	WEST						
	Production and shipments:						
14751 01	Crude phosphate rock (ore or matrix).....	5.0	2.3	9.4	2.8	1.0	6.7
14752 01	Washed or concentrated phosphate rock.....				0.7		
14752 06	Dried phosphate rock.....	2.4	2.2	21.5	0.7	1.5	12.5
14752 08	Calcined or sintered phosphate rock.....						
14752 09	Net shipments of phosphate rock ⁷	(X)	4.1	29.2	(X)	2.1	18.2
	Product and Geographic Area	1967		1963			
		Shipment including interplant transfers		Shipment including interplant transfers			
		Quantity (1,000 short tons)	Value (million dollars)	Quantity (1,000 short tons)	Value (million dollars)		
1476- --	ROCK SALT, TOTAL.....	⁹ 11,747.8	⁹ 79.8	⁹ 8,769.0	⁹ 58.2		
14760 00	Northeast and North Central.....	6,802.9	45.1	5,562.0	32.8		
14760 00	West South Central.....	⁹ 4,944.9	⁹ 34.7	2,925.0	24.3		
14760 00	West.....			⁹ 282.0	⁹ 1.1		

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic areas	1967			1963		
		Production (1,000 long tons)	Shipments including interplant transfers		Production (1,000 long tons)	Shipments including interplant transfers	
			Quantity (1,000 long tons)	Value (million dollars)		Quantity (1,000 long tons)	Value (million dollars)
1477- --	SULFUR ¹⁰	7,004.1	7,607.3	271.2	4,883.0	4,923.0	113.1
Product					Value of shipments including interplant transfers (million dollars)		
					1967	1963	
1479- --	CHEMICAL AND FERTILIZER MINING, N.E.C. ¹¹				¹² 13.3	¹² 13.2	

Note: Detailed figures may not add to the totals because of independent rounding.

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

(X) Not applicable. ^rRevised.¹Represents net shipments obtained by subtracting minerals received for preparation from gross shipments.²Figures for West are included with those for South.³Includes data for establishments in the Northeast Region.⁴Represents net shipments obtained from gross shipments of crude and processed or refined salts by subtracting shipments of crude salts to other establishments for processing or refining.⁵Represents production from underground mines only. Does not include production from well brines or dry-lakes brines; only shipments were reported for such operations.⁶Crude salts are included with processed or refined salts.⁷Represents "All other shipments" of crude and washed or concentrated phosphate rock plus shipments of dried and calcined or sintered phosphate rock.⁸Includes figures for phosphate rock mined, washed, or concentrated in Pennsylvania, Arkansas, Louisiana, and Texas, amounting to less than 5 percent of this total.⁹Represents net shipments obtained by subtracting minerals received for preparation from gross shipments.¹⁰Represents Frasch process sulfur and sulfur ore, the latter amounting for 1963 to only about 1,000 tons valued at \$15 thousand.¹¹Represents pyrites and such other miscellaneous chemical and fertilizer minerals as spodumene, lithium carbonate, wollastonite, and natural wollastonite, and natural iron oxide pigments.¹²Represents net shipments obtained from gross shipments by subtracting minerals received from other establishments for preparation.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1472. --BARITE			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.5	(X)	¹ 4.9
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	3.2	(X)	¹ 4.5
147091	Minerals mined and received for preparation: Mined and prepared at same establishment..... Received for preparation.....	1,000 short tons.	815.5 (X)	(X) (²)	850.0 (X)	(X) (³)
353011	Purchased machinery installed.....		(X)	1.1	(X)	0.7
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....		}	² 0.3	}	¹ 34.5
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....		(X)	1.7		
974000	Undistributed supplies ⁴					
	Fuels used, total.....		(X)	0.3	(X)	0.4
121005	Coal.....	1,000 short tons.	(NA)	(⁵)	(Z)	}
291141	Fuel oil.....	1,000 barrels....	18.7	0.1	22.0	
291151	Gas.....	Million cu. ft...	233.3	(⁵)	451.0	
131300	Gasoline.....	1,000 gallons....	288.0	0.1	328.0	
291111	Other fuels.....		(X)	⁵ 0.1	(X)	
960018	Undistributed fuels ⁴					
977000						
	<u>SOUTH REGION</u>					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	1.7	(X)	¹ 2.7
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.5	(X)	¹ 2.4
353011	Purchased machinery installed.....		(X)	0.4	(X)	0.5
	Fuels used, total.....		(X)	0.2	(X)	0.2
	<u>Type of Operation</u>					
	UNITED STATES					
	Producing open pit mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.5	(X)	¹ 2.9
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	2.3	(X)	¹ 2.7
147091	Minerals received for preparation: Mined and prepared at same establishment.....	1,000 short tons.	591.3	(X)	(NA)	(X)
353011	Purchased machinery installed.....		(X)	(D)	(X)	0.6
	Fuels used, total.....		(X)	0.2	(X)	0.2
291141	Fuel oil.....	1,000 barrels....	(D)	0.1	16.0	(NA)
291151						
			INDUSTRY 1473. --FLUORSPAR			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	8.5	(X)	¹ 6.3
	Selected supplies, mineral received for preparation, and purchased machinery installed, total.....		(X)	7.9	(X)	¹ 5.9
147091	Minerals mined and received for preparation: Mined and prepared at same establishment..... Received for preparation.....	1,000 short tons.	761.0 274.7	(X) 3.4	450.0 266.0	(X) 3.3

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1473, --FLUORSPAR--Continued			
	Geographic Area--Continued					
	UNITED STATES--Continued					
353011	Purchased machinery installed.....		(X)	0.5	(X)	0.3
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 lbs.....	821.8	0.2	}	12.3
289212	Ammonium nitrate.....	do.....	524.7	(Z)		
289214	Blasting accessories.....	do.....	(X)	0.1		
331201	Steel mill shapes and forms.....	do.....	(X)	0.6		
970099	All other supplies.....	do.....	(X)	3.2		
974000	Undistributed supplies ⁴	do.....				
	Fuels used, total.....		(X)	0.6	(X)	0.5
121005	Coal.....	1,000 short tons.	(D)	(D)	24.0	}
291141	Fuel oil.....	1,000 barrels...	67.9	0.3	31.0	
291151	Gas.....	Million cu. ft...	167.6	(Z)	86.0	
131300	Gasoline.....	1,000 gallons...	767.0	(Z)	104.0	
291111	Other fuels.....		(X)	0.2	(X)	
960018	Undistributed fuels ⁴					
977000						
	Type of Operation					
	UNITED STATES					
	Producing underground mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.6	(X)	12.3
	Producing preparation plants only:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.9	(X)	(NA)
			INDUSTRY 1474, --POTASH, SODA, AND BORATE MINERALS			
	Geographic Area					
	UNITED STATES					
	Selected supplies, minerals received for preparation purchased machinery installed, and fuels used, total.....		(X)	63.2	(X)	150.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	51.3	(X)	140.5
147091	Minerals received for preparation.....		(X)	(⁶)	(X)	(³)
353011	Purchased machinery installed.....		(X)	16.6	(X)	11.8
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 lbs.....	4,250.5	0.9	}	128.7
289212	Ammonium nitrate.....	do.....	19,617.0	0.8		
289214	Blasting accessories.....	do.....	(X)	0.8		
331201	Steel mill shapes and forms.....	do.....	(NA)	5.2		
970099	All other supplies.....	do.....	(X)	19.9		
974000	Undistributed supplies ⁴					
	Fuels used, total.....		(X)	11.9	(X)	9.7
291141	Fuel oil.....	1,000 barrels...	377.5	1.1	677.0	}
291151	Gas.....	Million cu. ft...	39,303.1	10.5	21,202.0	
131300	Gasoline.....	1,000 gallons...	555.0	0.2	777.0	
291111	Other fuels.....		(X)	0.1	(X)	
960018	Undistributed fuels ⁴					
977000						

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1474. --POTASH, SODA, AND BORATE MINERALS--Con.			
	<u>Geographic Area--Continued</u>					
	UNITED STATES--Continued					
	WEST SOUTH CENTRAL AND MOUNTAIN DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	44.9	(X)	¹ 33.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	40.1	(X)	¹ 30.2
353011	Purchased machinery installed.....		(X)	12.3	(X)	9.0
331201	Steel mill shapes and forms.....		(X)	5.2	(NA)	(NA)
	Fuels used, total.....		(X)	4.7	(X)	3.1
291141	Fuel oil.....	1,000 barrels...	26.8	0.1	30.0	(NA)
291151						
131300	Gas.....	Million cu. ft...	21,602.1	4.5	12,424.0	(NA)
	NEW MEXICO					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	28.5	(X)	¹ 25.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	25.9	(X)	¹ 23.2
353011	Purchased machinery installed.....					
289211	Explosive materials, except ammonium nitrate.....		}	(NA)	(X)	(NA)
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
	Fuels used, total.....		(X)	2.6	(X)	2.0
	PACIFIC (CALIFORNIA) DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	18.3	(X)	¹ 16.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	11.2	(X)	¹ 10.3
353011	Purchased machinery installed.....		(X)	4.3	(X)	2.8
	Fuels used, total.....		(X)	7.1	(X)	6.6
291141	Fuel oil.....	1,000 barrels...	350.1	1.0	647.0	(NA)
291151						
131300	Gas.....	Million cu. ft...	17,701.0	6.0	8,778.0	(NA)
	<u>Type of Operation</u>					
	UNITED STATES					
	Producing underground mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	42.1	(X)	¹ 28.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	37.8	(X)	¹ 26.1
353011	Purchased machinery installed.....		(X)	11.4	(X)	5.5
	Fuels used, total.....		(X)	4.3	(X)	2.8
131300	Gas.....	Million cu. ft...	20,285.1	4.2	12,409.0	(NA)
			INDUSTRY 1475. --PHOSPHATE ROCK			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuel used, total.....		(X)	120.1	(X)	¹ 71.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	112.7	(X)	¹ 66.1
147501	Phosphate rock mined and received for preparation, total....	Million long tons	122.2	(X)	68.5	(X)
	Mined and prepared at same establishment.....	do.....	108.8	(X)	59.6	(X)
	Received from other establishments.....	do.....	13.3	52.1	8.8	33.6
353011	Purchased machinery installed.....		(X)	33.6	(X)	14.9

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1475.--PHOSPHATE ROCK--Continued			
	Geographic Area--Continued					
	UNITED STATES--Continued					
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....		(X)	(7)	(X)	117.6
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....		(X)	1.2		
974000	Undistributed supplies ⁴		(X)	25.8		
	Fuels used, total.....		(X)	7.4	(X)	5.0
121005	Coal.....	1,000 short tons	(D)	(8)	146.0	
291141	Fuel oil:					
	Distillate.....	1,000 barrels...	671.4	2.6	989.0	5.0
291151	Residual.....	do.....	364.6	0.9		
131300	Gas.....	Million cu. ft..	7,087.4	2.6	2,208.0	
291111	Gasoline.....	1,000 gallons...	1,089.0	0.3	1,323.0	
960018	Other fuels.....					
977000	Undistributed fuels ⁴		(X)	81.1	(X)	
	NORTHEAST AND SOUTH REGIONS					
	Selected supplies, minerals received for preparation purchased machinery installed, and fuels used, total.....		(X)	109.3	(X)	164.6
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	102.7	(X)	160.1
147501	Phosphate rock mined and received for preparation:					
	Mined and prepared at same establishment.....	Million long tons.....	106.2	(X)	(NA)	(X)
	Fuels used, total.....		(X)	6.6	(X)	4.5
	FLORIDA					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	99.4	(X)	155.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	94.2	(X)	152.1
147501	Phosphate rock mined and received for preparation, total....	Million long tons.....	112.1	(X)	62.7	(X)
	Mined and prepared at same establishment.....	do.....	99.4	(X)	54.4	(X)
	Received from other establishments.....	do.....	12.7	46.7	8.3	30.3
353011	Purchased machinery installed.....		(X)	27.8	(X)	10.7
	Fuels used, total.....		(X)	5.2	(X)	3.3
291141	Fuel oil.....	1,000 barrels...	820.6	2.7	919.0	(NA)
291151	Gas.....	Million cu. ft..	6,349.3	2.3	1,467.0	(NA)
131300						
	WEST REGION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	10.8	(X)	16.5
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	10.0	(X)	16.0
147501	Phosphate rock mined and received for preparation:					
	Mined and prepared at same establishment.....	Million long tons.....	2.7	(X)	(NA)	(X)
	Fuels used, total.....		(X)	0.8	(X)	0.5

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1475. --PHOSPHATE ROCK--Continued			
	<u>Type of Operation</u>					
	UNITED STATES					
	Producing open-pit mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	54.1	(X)	¹ 32.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	49.5	(X)	¹ 29.1
147501	Phosphate rock mined and received for preparation:					
	Received from other establishments.....	Million long tons	1.9	7.4	(NA)	4.7
353011	Purchased machinery installed.....		(X)	22.6	(X)	12.1
	Supplies used:					
331201	Steel mill shapes and forms.....		(X)	1.0	(NA)	(NA)
	Fuels used, total.....		(X)	4.6	(X)	3.0
291141	Fuel oil.....	1,000 barrels...	554.5	1.8	583.0	(NA)
291151	Gas.....	Million cu. ft...	4,544.6	1.7	1,286.0	
131300	Gasoline.....	1,000 gallons...	627.0	0.2	739.0	
291111						
	Producing preparation plants only:					
	Selected supplies minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	56.6	(X)	¹ 33.4
	Selected supplies, minerals received for preparation and purchased machinery installed, total.....		(X)	54.3	(X)	¹ 31.8
147501	Phosphate rock mined and received for preparation:					
	Received from other establishments.....	Million long tons	11.4	44.7	(NA)	29.0
	Fuels used, total.....		(X)	2.3	(X)	1.6
			INDUSTRY 1476. --ROCK SALT			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, mineral received for preparation, purchased machinery installed and fuels used, total.....		(X)	15.0	(X)	¹ 15.8
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	14.2	(X)	¹ 15.3
147091	Minerals mined and received for preparation:					
	Mined and prepared.....	1,000 short tons.	11,448.1	(X)	(NA)	(X)
	Received for preparation.....		(D)	(¹⁰)	(D)	(³)
353011	Purchased machinery installed.....		(X)	4.9	(X)	5.2
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 lbs.....	6,694.0	0.8	(X)	¹ 310.1
289212	Ammonium nitrate.....	do.....				
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....		(X)	¹⁰ 8.3		
974000	Undistributed supplies ⁴					
	Fuels used, total.....		(X)	0.8	(X)	0.5
291141	Fuel oil.....	1,000 barrels...	32.0	0.2	24.0	0.5
291151	Gas.....	Million cu. ft...	1,983.6	0.4	1,207.0	
131300	Gasoline.....	1,000 gallons...	171.0	0.1	286.0	
291111	Other fuels.....		(X)	0.2	(X)	
960018	Undistributed fuels ⁴					
977000						
	NORTHEAST AND NORTH CENTRAL REGIONS					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	7.6	(X)	¹ 6.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	7.3	(X)	¹ 6.2
28921-	Explosive materials.....		(X)	0.6	(X)	(NA)
	Fuels used, total.....		(X)	0.3	(X)	0.1
	<u>Type of Operation</u>					
	(Withheld to avoid disclosure of individual company data)					

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963--Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1477.--SULFUR				
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	35.7	(X)	¹ 13.3	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	26.3	(X)	¹ 5.8	
353011	Purchased machinery installed.....		(X)	10.3	(X)	0.8	
	Supplies used:						
331201	Steel mill shapes and forms.....		}	(X)	(X)	¹ 5.0	
970099	All other supplies.....						
974000	Undistributed supplies ⁴						
	Fuels used, total.....		(X)	9.4	(X)	7.5	
291141	Fuel oil.....	1,000 barrels...	(D)	(¹¹)	20.0	}	
291151	Gas.....		43,397.7	9.0	37,463.0		
131300	Gasoline.....	1,000 gallons...	(NA)	(¹¹)	328.0		
291111	Other fuels.....		(X)	¹¹ 0.4	(X)		
960018	Undistributed fuels ⁴						
977000							
			INDUSTRY 1479.--CHEMICAL AND FERTILIZER MINING, N. E. C.				
	<u>Type of Operation</u>						
	(Withheld to avoid disclosure of individual company data)						
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.4	(X)	¹ 6.6	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.2	(X)	¹ 6.5	
147091	Crude minerals received for preparation.....		(D)	(¹⁰)	(X)	0.5	
353011	Purchased machinery, installed.....		(X)	0.5	(X)	0.2	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....		}	(D)	{ }	¹ 5.7	
289212	Ammonium nitrate.....						
289214	Blasting accessories.....		(X)				
331201	Steel mill shapes and forms.....		(X)	1.6	(X)		
970099	All other supplies.....						
974000	Undistributed supplies ⁴						
	Fuels used, total.....		(X)	0.2	(X)	0.1	
121005	Coal.....				(NA)	}	
291141	Fuel oil.....	1,000 barrels...			7.0		
291151	Gas.....	Million cu. ft...	(X)	0.2	85.0		
131300	Gasoline.....	1,000 gallons...			28.0		
291111	Other fuels.....				(X)		
960018	Undistributed fuels ⁴				(X)		
977000							
	<u>Type of Operation</u>						
	(Withheld to avoid disclosure of individual company data)						

Note: Detailed figures may not add to the totals because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. ^eFrom 10 to 30 percent of this figure was estimated. (Z) Less than one-half of this unit of measure specified.¹Includes purchases for resale.²The cost of minerals received for preparation are included with the costs of explosive materials, blasting accessories, and steel mill shapes and forms.³The cost of minerals received for preparation is included with the costs of supplies used and undistributed supplies.⁴This item represents the total cost of supplies or fuels used for establishments that did not report detailed data. For 1967, this includes estimates for companies that were not mailed report forms.⁵The costs of coal and gas are included with the costs of other fuels and undistributed fuels.⁶The cost of minerals received for preparation is included with the costs of all other supplies and undistributed supplies.⁷The costs of explosive materials, except ammonium nitrate, ammonium nitrate, and blasting accessories are included with the costs of all other supplies and undistributed supplies.⁸The cost of coal is included with the costs of other fuels and undistributed fuels.⁹Includes figures for 5 establishments in Pennsylvania, North Carolina, Arkansas, Louisiana, and Texas.¹⁰The cost of minerals received for preparation is included with the costs of steel mill shapes and forms, all other supplies and undistributed supplies.¹¹The costs of fuel oil and gasoline are included with the costs of other fuels and undistributed fuels.



Appendix A

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

"Shipments" include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in "a" or "b."

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments" used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

"Capital expenditures" used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

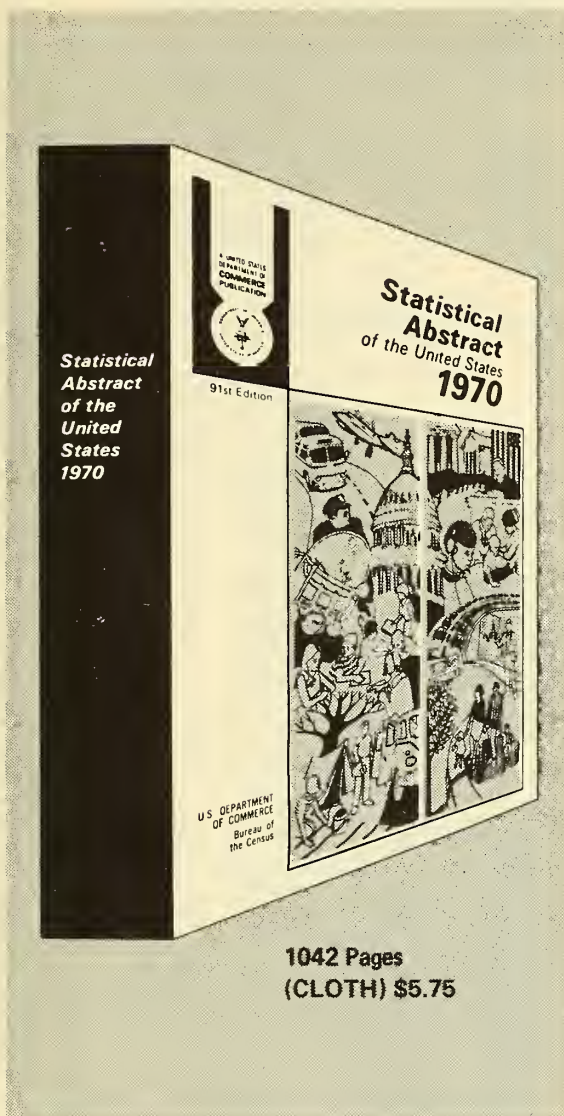
In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.

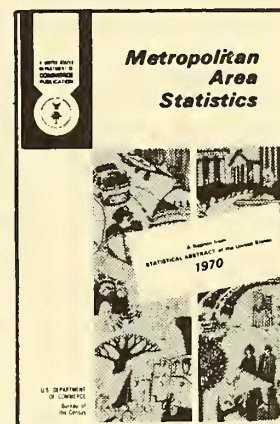
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1967 CENSUS OF Mineral Industries



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Issued December 1970



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Contents

(Page numbers listed here omit the code prefix which appears as part of number for each page.)

	page
Introduction	IV
Industry Text	1
TABLE 1 General Statistics: 1967 and Earlier Years	6
2A General Statistics by Geographic Area and Type of Operation: 1967 and 1963 . . .	12
2B General Statistics for Manufacturing Establishments With Mining Operations, by Geographic Area: 1967 and 1963	14
3 Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967 . .	15
4 General Statistics, by Employment Size of Establishment: 1967	18
5 Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963	20
6 Primary Products of the Industry, by Geographic Area: 1967 and 1963	21
7 Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Area and Type of Operation: 1967 and 1963	24
APPENDIX Explanation of Terms	A-1

Introduction

GENERAL—This report from the 1967 Census of Mineral Industries is one of a series of 14 industry reports each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and on special subjects such as size of establishment, type of operation, and capital expenditures.

These separate reports will subsequently be included as portions of the final census volume. The volume, Census of Mineral Industries, will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments, capital expenditures, value added in mining, selected materials consumed, and energy used, and will include the 14 reports of individual industries or industry groups which give information such as that shown in the present report. In addition, it will also contain area general statistics (number of establishments, employment, payrolls, value added in mining, value of shipments, and capital expenditures) for each State and county, by industry groups and important individual industries.

The "Introduction" to the final volume of the Census of Mineral Industries will discuss at greater length many of the subjects described briefly in this introduction. For example, the volume text will discuss the economic significance of the mining sector; the relation of value added in mining to value added by manufacture; some of the changes in statistical concepts over the history of the census; the valuation problems arising from intracompany transfers between mining establishments of a company and between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

The 1967 census is the 16th census of mineral industries of the United States. The first census of mineral industries covered 1840, and a census was taken at approximately 10-year intervals through 1939, usually in connection with the decennial census of population. A partial census covering the coal industries was conducted in 1935 in cooperation with the U.S. Bureau of Mines as part of the 1935 Census of Business. After World War II, the legislation was changed to provide for a census of mineral industries every 5 years (Title 13, U.S. Code). The minerals censuses which have been taken under this legislation have covered 1954, 1958, and 1963. The current legislation stipulates that the census be conducted covering years ending in "2" and "7." Thus, the next minerals census will be taken in 1973 covering mining activity during 1972.

The 1967 Census of Mineral Industries was conducted jointly with the censuses of business (wholesale, retail, and services) and manufactures, covering the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1967 were also conducted in Puerto Rico jointly with the Commonwealth Government.

SCOPE OF THE CENSUS OF MINERAL INDUSTRIES: DEFINITION OF MINERAL INDUSTRIES—The 1967 Census of Mineral Industries covers all establishments primarily engaged in mining as defined in the 1967 edition of the *Standard Industrial Classification Manual*. This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Bureau of the Budget. This system of classification is in general use among government agencies and also outside the government. In 1957, the system was extensively revised although the changes for the mining industries were not very significant.

The *Standard Industrial Classification Manual* defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately but within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division, but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are also excluded.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and man-hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on mining activities at these operations has been obtained in the 1967 Census of Manufactures and are included in the mining reports. Wherever these data are included, they are clearly specified.

ESTABLISHMENT BASIS OF REPORTING—The census of mineral industries is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if company records permit such a separation and if the activities are substantial in size.

Census tabulations of establishment reports differ substantially from those prepared on a company basis; that is, from consolidated reports which not only combine activities at different locations (thereby eliminating interplant transfers) but also include the manufacturing and business activities of companies primarily engaged in mining.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or pits, however, are not necessarily considered individual establishments.

For oil and gas field operation and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Every concern which operated oil and gas wells, drilled such wells for its own account or for others, performed oil and gas field services for others during any part of calendar year 1967 was required to submit a separate report for each State, or for each district within Texas, Louisiana, New Mexico, and California (however, information on employment, oil and gas production, and capital expenditures was requested by county). Further, concerns which supplied contract services for others were required to submit a separate report for each State. (In this instance also, information on employment, receipts for services, and capital expenditures was requested by county.)

In 1967, as in recent census years, a minimum size limit was set for including establishments in the census. Data were included for all establishments employing one person or more at any time during the census year. For the first time in 1967, single-unit establishments without paid employees were excluded; however, these establishments for mining as a whole accounted for approximately 1 or 2 percent of value added. In the 1963, 1958, and 1954 censuses, establishments without paid employees were included if value of shipments or expenditures amounted to \$500 or more. In the 1939 and 1929 censuses, in general, criteria similar to that used in 1963, 1958, and 1954 were applied except that the cutoff for shipment or expenditures was \$2,500. For 1919, the criteria used were \$500 on value of products, and \$5,000 on expenditures for development work. Minimums for size of establishment included were not provided for censuses prior to 1919. These changes in the minimum size limit do not appreciably affect the historical comparability of the census figures except for statistics on number of establishments.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway and construction contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and treatment plants where all of the ore is transferred to a company-owned smelter.

THE CENSUS REPORT FORMS—The 1967 Census of Mineral Industries was primarily a mail canvass; whereas the 1963, 1958, and 1954 censuses were completely on a mail basis. Ten different report forms were used to canvass the 53 mining industries.

From the administrative records of the Social Security Administration and existing Bureau of the Census records, it was possible to determine correctly, in most cases, the type of form each mining establishment should receive.

In the 1967 census, for the first time, approximately 10,000 single-unit establishments with one to four employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1967 censuses of business, manufactures, and mineral industries. Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For mining as a whole, they account for less than 1 percent of value added. The importance of these small establishments in each industry is shown in the texts for the specific industries beginning on page 1. Detailed cost of supplies data for these small establishments were not estimated. The entire estimated cost of supplies was imputed to a "not specified by kind" category.

INDUSTRY AND TYPE-OF-OPERATION CLASSIFICATIONS OF ESTABLISHMENT—Each of the establishments covered in the census was classified in one of 53 mineral industries in accordance with the industry definitions in the Standard Industrial Classification (SIC) system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The resulting group of establishments must be significant in terms of their number, value added in mining, value of shipments, and number of employees. The application of these criteria has led to the establishment of 53 mining industries. For each industry, a 4-digit number is assigned. The classification system also provides broader groups of industries, with 20 3-digit groups and 5 2-digit groups. Within industries, the system provides for 7-digit products and 5-digit product classes. These are considered the primary products of the industry if the product code begins with the same first four digits as the industry code. An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. (For service industries, the classification is on the basis of receipts for services performed.)

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have no significant effect on the statistics other than the number of establishments. As indicated above, report forms were not mailed to very small establishments (less than five employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 or more employees are far more reliable than the total number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The general statistics (tables 1 to 4—employment, value added in mining, total value of shipments including resales and miscellaneous receipts, etc.) shown for an industry, therefore, reflect not only the primary activities of an establishment in that industry but also its activities of a secondary nature. The product

statistics in table 6 represent the output of all establishments whether they are classified in the industry to which the product is primary or in other industries. For this reason, in relating the industry statistics, especially the value of shipments, in this report (tables 1 to 4) to the product statistics (table 6) the composition of the industry's output as shown in table 5 should be considered. This phenomenon of primary-secondary production is considerably less significant in mining than in manufacturing.

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Wherever possible, separate figures are shown for establishments using underground mining methods only, using open-pit methods only, and using a combination of underground and open-pit methods. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, for establishments with preparation plants only, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year. For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented only oil wells, both oil and gas wells, or only gas wells, and on the basis of whether or not they drilled wells.

Statistics are also usually provided on the production of minerals mined and used in the same establishment in producing prepared minerals, or used in the producing establishment for fuel.

Differences in the integration of production processes and in types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and materials figures.

CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States and States are given precedence over counties. In tables showing industry detail, major industry group (2-digit) totals take

precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because it was considered preferable to show (1) regional figures for an industry, even at the cost of withholding figures for some States (usually the least significant) in a region, rather than to show all publishable figures for the individual States, and group all "disclosure" States in the United States in an "all other" category as was done in the 1939 and earlier censuses; and (2) industry group statistics rather than individual industries within each State; thus, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose, the following combinations of census divisions have been used:

NORTHEAST
New England
Middle Atlantic

SOUTH
South Atlantic
East South Central
West South Central

NORTH CENTRAL
East North Central
West North Central

WEST
Mountain
Pacific

ABBREVIATIONS—The following abbreviations and symbols occur frequently, both in the tables and footnotes:

—	zero
X	not applicable
NA	not available
D	withheld to avoid disclosing figures for individual companies
n.e.c.	not elsewhere classified
n.s.k.	not specified by kind
kw.-hrs.	kilowatt-hours
equiv.	equivalent
SIC	Standard Industrial Classification

Other abbreviations, such as lb., gal., and bbl., are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 lbs.; where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as "long tons."

The 1963 figures shown in the industry reports include a few revisions of previously published 1963 census totals and are comparable with the 1967 figures unless otherwise noted.

NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES AND MISCELLANEOUS NONMETALLIC MINERALS

This report shows 1967 Census of Mineral Industries statistics for establishments classified in Industry Group 148, Nonmetallic Minerals (Except Fuels) Services, and Industry Group 149, Miscellaneous Nonmetallic Minerals, Except Fuels. The separate industries included in these two groups are as follows:

SIC Code and Title

- 1481--Nonmetallic Minerals (Except Fuels) Services
- 1492--Gypsum
- 1493--Mica
- 1494--Native Asphalt and Bitumens
- 1495--Pumice and Pumicite
- 1496--Talc, Soapstone, and Pyrophyllite
- 1497--Natural Abrasives, Except Sand
- 1498--Peat
- 1499--Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified

This report also includes figures for administrative offices, warehouses, storage facilities, and other auxiliary units which service mining establishments.

INDUSTRY DESCRIPTIONS

NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES

Industry 1481--Nonmetallic Minerals (Except Fuels) Services. This industry represents establishments primarily engaged in the removal of overburden, strip mining, and other services for nonmetallic minerals (except fuels) for others on a contract, fee, or other basis. Establishments primarily engaged in performing hauling services are excluded from this industry and all other industries in the Mining Division.

Establishments classified in the Nonmetallic Minerals (Except Fuels) Services Industry were required to submit a separate report for each State in which mining services were performed. These reports were classified on the basis of the principal type of service performed and the principal industry served to determine their industry or subindustry classification. Each report included data on the number of employees in March, the amount received for services, and capital expenditures by county. For geographic area statistics, all other figures in each report were allocated on the basis of these reported data.

The total receipts in the Nonmetallic Minerals (Except Fuels) Services Industry in 1967 amounted to \$15.3 million.

The services reported by these contractors represent only about 43 percent of all contract services performed for the industries in Major Group 14, Nonmetallic Minerals (Except Fuels) Mining. Operators of mining establishments in Major Group 14 reported receipts of \$20.3 million for contract services. It is probable that most of these receipts represented work for establishments classified in Major Group 14. In total, therefore, the census reports for Major Group 14 account for contract receipts amounting to about \$35.6 million, or 35 percent of the total payments for contract work by establishments classified in Major Group 14. Much of the remaining contract work was probably

hauling services and contract construction which are not within the scope of the 1967 economic censuses (manufactures, mineral industries, and business). The following table summarizes for groups of industries the available data on payments and receipts for contract services in Major Group 14 in 1967:

PAYMENTS AND RECEIPTS FOR SERVICES IN THE NONMETALLIC MINERALS MINING INDUSTRIES: 1967

Industry served	Cost of contract work as reported by mine operators (million dollars)	Receipts for contract services (million dollars)		
		Total	By nonmetallic minerals (except fuels) services industries	By mine operators classified in nonmetallic minerals (except fuels) mining industries
Nonmetallic minerals				
mining, total.....	102.2	35.6	15.3	20.3
Stone, sand and gravel....	60.3	25.8	5.6	20.2
Clay and related minerals.	7.3			
Chemical and fertilizer				
minerals.....	27.3	9.9	5.7	0.2
Miscellaneous nonmetallic				
minerals.....	7.3		4.0	

MISCELLANEOUS NONMETALLIC MINERALS, EXCEPT FUELS

Industry 1492--Gypsum. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing gypsum. Calcining activities are excluded. However, if a gypsum mine is part of an establishment producing gypsum or other manufactured products, the entire establishment is classified in the manufacturing industry 3275, Gypsum Products, or other appropriate manufacturing industry. In 1967, about two-thirds of all gypsum produced was mined at such establishments. Selected statistics for such mines are included in tables 1, 2, and 6A of this report.

Industry 1493--Mica. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing mica. Establishments engaged in grinding mica which do not include a mine are classified in the manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated.

Industry 1494--Native Asphalt and Bitumens. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing native asphalt and bitumens, including gilsonite, wurtzilite, grahamite, and ozokerite. The mining of bituminous sandstone and bituminous limestone is also included.

Industry 1495--Pumice and Pumicite. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing pumice and pumicite (volcanic ash).

Industry 1496--Talc, Soapstone, and Pyrophyllite. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing talc, soapstone, or pyrophyllite. Dimension soapstone is included in this industry. Establishments engaged in grinding or otherwise preparing talc, soapstone, or pyrophyllite which do not include a mine are classified in the manufacturing industry 3295, Minerals, and Earths, Ground or Otherwise Treated.

Industry 1497--Natural Abrasives, Except Sand. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing natural abrasives, such as corundum, industrial diamonds, emery, garnet, and tripoli. This industry includes the shaping of natural abrasive stones at the quarry. Establishments primarily engaged in the production of blast, grinding, or polishing sand are classified in industry 1446, Industrial Sand, and those primarily engaged in the production of diatomite in industry 1499, Miscellaneous Nonmetallic Minerals, N.E.C.

Industry 1498--Peat. This industry represents establishments primarily engaged in mining peat, and in the preparation of peat.

Industry 1499--Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, not elsewhere classified, such as asbestos, diatomite, natural gem stones, graphite, greensand, perlite, shell, Iceland spar (optical grade calcite), and vermiculite. Separate subindustry figures have been tabulated for 1967 for "Asbestos," "Diatomite," "Perlite," "Shell," and "Vermiculite, greensand, and other minerals."

The total value of shipments of the Miscellaneous Nonmetallic Minerals (Except Fuels) industries in 1967 was \$151.9 million, of which primary products of these industries amounted to \$147.6 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to only \$4.3 million. Of the total value of shipments for this group, the Gypsum Industry accounted for about \$9 million; the Mica Industry, \$7 million; the Native Asphalt and Bitumens Industry, \$9 million; the Pumice and Pumicite Industry, \$3 million; the Talc, Soapstone, and Pyrophyllite Industry, \$21 million; the Natural Abrasives Industry, \$6 million; the Peat Industry, \$9 million; and the Miscellaneous Nonmetallic Minerals, N.E.C., Industry, \$89 million. These figures represent gross value of shipments and some of them contain duplication due to the inclusion of shipments of crude minerals to other establishments in the same industry for preparation. However, the cost of crude minerals received for preparation in all of these industries was only \$0.4 million.

COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Miscellaneous Nonmetallic Minerals (Except Fuels) Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are as follows:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used. Differences between shipments and sold and used, for example, account for significant differences between Census and Mines figures shown for gypsum and scrap mica.
2. The Bureau of the Census excludes single unit establishments without paid employees. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to product of such small operations is usually very small.

3. Differences exist in coverage in certain areas for both collecting agencies.

4. Census figures are sometimes reported at a different level of preparation than Bureau of Mines figures. In general, Census uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as milling, washing, grinding, and sizing. This explains, in part, the differences between prepared figures for the two agencies for talc, soapstone, and pyrophyllite.

5. Census includes the value of containers if the mineral product is sold with containers from the mine or preparation plant. This may explain some of the differences in total value for peat.

1967 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics	
		Production (quantity)	Shipments including interplant transfers		Production	
			Quantity	Value (million dollars)	Quantity	Value (million dollars)
Gypsum:						
Crude.....	1,000 short tons.....	¹ 9,229.5	585.1	1.5	9,313.0	34.4
Prepared (crushed, ground, screened, or dried).....	...do.....	(NA)	5,021.1	23.0	(NA)	(NA)
Mica:						
Hand-cobbed and sheet mica.....	1,000 lbs..	(²)	(²)	(²)	³ 20.5	(D)
Scrap (or flake) mica.	1,000 short tons.....	156.0	⁴ 35.0	⁴ 1.1	³ 119.5	³ 2.9
Ground mica.....	...do.....	⁵ 119.6	⁵ 119.7	⁵ 5.9	³ 97.0	³ 5.8
Native asphalt and bitumens:						
Gilsonite.....	...do.....	(D)	(D)	8.7	1,867.7	8.1
Bituminous limestone and sandstone.....	...do.....	1,698.0	1,698.0			
Pumice and pumicite.....	...do.....	1,329.3	1,322.1	3.3	^{3,6} 3,446.0	³ ⁶ 5.1
Talc, soapstone, and pyrophyllite:						
Crude.....	...do.....	980.9	⁴ 293.9	⁴ 3.2	⁷ 963.5	⁷ 6.9
Prepared.....	...do.....	⁸ 611.7	⁸ 604.6	⁸ 17.0	⁷ ⁹ 781.0	⁷ ⁹ 20.2
Natural abrasives, except sand.....	...do.....	104.8	103.2	5.7	³ ¹⁰ 94.0	³ ¹⁰ 2.8
Peat.....	...do.....	587.2	587.6	8.4	⁹ 620.0	⁹ 6.8
Asbestos, crude and prepared.....	...do.....	119.5	122.2	11.2	⁹ 123.2	⁹ 11.1
Diatomite, prepared.....	...do.....	¹¹ 706.1	¹¹ 618.3	¹¹ 37.3	¹² 627.2	¹² 34.0
Perlite.....	...do.....	538.1	¹³ 414.9	¹³ 4.8	³ 413.0	³ 4.0
Shell.....	...do.....	13.7	13.8	24.5	³ 22.0	³ 33.3
Other nonmetallic minerals.....	.....	(NA)	(NA)	10.1	(X)	¹⁴ 8.7

(D) Withheld to avoid disclosure. (X) Not applicable. (NA) Not available.

¹In addition to gypsum mined for shipment in crude or prepared form, includes 6,212.2 thousand tons of gypsum valued at approximately \$24.0 thousand, produced and used in the same establishment in the manufacture of calcined gypsum products. ²In 1967, no establishment reported any production or shipments of either hand-cobbed or sheet mica.

³Represents minerals sold or used by producers. ⁴Represents net shipments, that is, gross shipments less minerals received for preparation. ⁵Excludes mica processed at establishments classified in the manufacturing industries. ⁶Includes volcanic cinder. ⁷Excludes dimension soapstone. ⁸Excludes ore processed at establishments classified in the manufacturing industries. ⁹Represents sales. ¹⁰Excludes emery, which amounted in 1966 to 11 thousand tons valued at \$0.2 million. ¹¹Includes crude diatomite produced for shipment without preparation, amounting to less than one percent of the total. ¹²Represents average annual production, 1966-1968. ¹³Includes some expanded perlite produced in conjunction with mining. ¹⁴Represents gem stones, vermiculite, graphite, greensand marl, stauroilite, and other items not elsewhere classified.

TABLE 1. General Statistics: 1967 and Earlier Years

(See appendix, Explanation of Terms)

Year and industry	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)
INDUSTRY 1481.--NONMETALLIC MINERALS SERVICES								
1967 ²	(NA)	106	10	0.8	5.9	0.8	1.5	4.9
1963.....	118	119	11	0.9	4.6	0.8	1.6	4.2
1958.....	74	75	6	1.1	3.5	1.0	1.9	3.0
1954.....	62	62	4	0.6	2.3	0.6	1.3	2.2
1939.....	65	65	(NA)	0.3	0.4	0.3	0.6	0.3
1902 ⁴	(NA)	(NA)	(NA)	0.6	(NA)	(NA)	(NA)	(NA)
GROUP 149.--MISCELLANEOUS NONMETALLIC MINERALS AND SIMILAR MINES IN MANUFACTURES								
1967, total ²	(NA)	412	85	6.9	43.9	5.7	12.0	33.4
Miscellaneous nonmetallic minerals.....	(NA)	378	78	6.4	41.0	5.2	11.0	30.6
Miscellaneous minerals in manufactures.....	(NA)	34	7	⁶ 0.5	⁶ 2.9	⁶ 0.5	1.0	2.9
1963, total.....	⁵ 420	490	69	6.2	32.1	5.3	11.1	26.4
Miscellaneous nonmetallic minerals.....	⁵ 413	453	53	5.5	28.5	4.6	9.7	22.8
Miscellaneous minerals in manufactures.....	9	37	16	⁶ 0.7	⁶ 3.6	⁶ 0.7	1.4	3.6
1958, total.....	⁵ 445	513	71	6.5	27.4	5.5	11.2	21.3
Miscellaneous nonmetallic minerals.....	438	481	55	5.7	23.5	4.7	9.5	17.5
Miscellaneous minerals in manufactures.....	8	32	16	⁶ 0.9	⁶ 3.8	⁶ 0.9	1.7	3.8
1954, total.....	783	897	(NA)	6.8	24.4	6.0	12.1	19.9
Mines and plants classified in mineral industries.....	779	870	52	5.8	20.4	4.9	10.1	15.9
Mines included in establishments classified in manufacturing industries.....	5	27	(NA)	⁶ 1.0	⁶ 4.0	⁶ 1.0	2.1	4.0
1939 ⁸	⁵ 211	² 256	(NA)	5.1	5.7	4.5	8.9	4.4
1929 ⁸	(NA)	171	(NA)	5.1	6.8	4.6	(NA)	5.4
1919 ⁸	(NA)	214	(NA)	5.4	5.8	4.8	(NA)	4.7
1909 ¹¹	⁵ 373	373	(NA)	7.4	4.2	6.7	(NA)	3.3
1902 ⁸	⁵ 685	⁹ 315	(NA)	3.9	2.2	¹² 3.4	(NA)	1.6
1889 ⁸	(NA)	(NA)	(NA)	2.3	0.8	(NA)	(NA)	(NA)
INDUSTRY 1492.--GYPSUM INDUSTRY AND GYPSUM MINES IN MANUFACTURES								
1967, total ²	(NA)	67	12	0.9	5.2	0.8	1.7	4.8
Gypsum industry.....	(NA)	33	5	0.4	2.3	0.3	0.7	1.9
Gypsum mines in manufactures.....	(NA)	34	7	⁶ 0.5	⁶ 2.9	⁶ 0.5	1.0	2.9
1963, total.....	40	74	22	1.2	6.0	1.1	2.2	5.5
Gypsum industry.....	33	37	6	0.5	2.4	0.4	0.8	1.9
Gypsum mines in manufactures.....	9	37	16	⁶ 0.7	⁶ 3.6	⁶ 0.7	1.4	3.6
1958, total.....	36	64	20	1.3	5.6	1.2	2.5	5.3
Gypsum industry.....	29	32	4	0.4	1.8	0.4	0.8	1.5
Gypsum mines in manufactures.....	8	32	16	⁶ 0.9	⁶ 3.8	⁶ 0.9	1.7	3.8
1954, total.....	38	64	(NA)	1.5	5.9	1.4	3.0	5.6
Gypsum industry.....	34	37	5	0.4	1.9	0.4	0.9	1.6
Gypsum mines in manufactures.....	5	27	(NA)	⁶ 1.0	⁶ 4.0	⁶ 1.0	2.1	4.0
1939.....	34	⁹ 59	(NA)	1.4	1.9	1.3	2.5	1.6
1929 ¹³	(NA)	60	(NA)	2.2	2.9	2.1	(NA)	2.6
1919.....	(NA)	47	(NA)	2.5	3.0	2.2	(NA)	2.5
1909.....	82	82	(NA)	3.9	2.4	3.5	(NA)	1.8
1902.....	45	⁹ 62	(NA)	1.7	1.1	¹² 1.5	(NA)	0.8
1889.....	(NA)	⁹ 24	(NA)	0.8	0.2	¹⁴ 0.7	(NA)	(NA)
INDUSTRY 1493.--MICA								
1967 ²	(NA)	20	5	0.3	1.8	0.3	0.5	1.2
1963.....	31	34	6	0.4	1.6	0.4	0.7	1.3
1958.....	142	149	8	0.7	2.0	0.6	1.2	1.7
1954 ¹⁶	446	498	6	0.7	1.3	0.7	1.2	1.3
1939.....	22	⁹ 21	(NA)	0.2	0.1	0.2	0.4	0.1
1929 ¹³	(NA)	24	(NA)	0.2	0.3	0.2	(NA)	0.2
1919 ¹³	(NA)	65	(NA)	0.5	0.3	0.4	(NA)	0.3
1909.....	77	77	(NA)	0.3	0.1	0.3	(NA)	0.1
1902.....	38	⁹ 49	(NA)	0.1	0.1	¹² 0.1	(NA)	(Z)
1889.....	(NA)	⁹ 4	(NA)	0.2	(Z)	¹⁴ 0.1	(NA)	(Z)
1880.....	(NA)	⁹ 22	(NA)	0.3	0.1	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts (million dollars)	Quantity of primary products ¹ (1,000 short tons)	Capital expenditures (million dollars)
INDUSTRY 1481.--NONMETALLIC MINERALS SERVICES--Con.							
1967 ²	11.2	4.1	1.8	15.3	15.3	(X)	1.9
1963.....	9.3	4.3	1.1	13.2	13.2	(X)	1.4
1958.....	6.2	1.9	0.7	7.9	7.9	(X)	0.8
1954.....	4.9	1.7	0.4	6.6	6.3	(X)	0.4
1939.....	0.7	³ 0.2	(NA)	1.0	1.0	(X)	0.1
1902 ⁴	(NA)	(NA)	(NA)	(NA)	0.2	(X)	(NA)
GROUP 149.--MISCELLANEOUS NONMETALLIC MINERALS AND SIMILAR MINES IN MANUFACTURES--Con.							
1967, total ²	134.1	44.3	(NA)	176.8	176.5	(X)	(NA)
Miscellaneous nonmetallic minerals.....	111.1	42.3	8.6	151.9	151.5	(X)	10.2
Miscellaneous minerals in manufactures.....	23.0	2.0	(NA)	⁷ 25.0	⁷ 25.0	(X)	(NA)
1963, total.....	104.2	31.4	(NA)	131.2	130.6	(X)	(NA)
Miscellaneous nonmetallic minerals.....	78.3	28.6	7.5	102.4	101.9	(X)	11.9
Miscellaneous minerals in manufactures.....	25.9	2.8	(NA)	⁷ 28.7	⁷ 28.7	(X)	(NA)
1958, total.....	86.5	25.2	(NA)	108.2	107.9	(X)	(NA)
Miscellaneous nonmetallic minerals.....	62.7	21.9	5.9	81.1	80.8	(X)	9.4
Miscellaneous minerals in manufactures.....	23.8	3.3	(NA)	⁷ 27.1	⁷ 27.1	(X)	(NA)
1954, total.....	70.1	20.3	(NA)	88.3	87.7	(X)	(NA)
Mines and plants classified in mineral industries.....	47.8	17.4	5.8	63.1	62.5	(X)	7.9
Mines included in establishments classified in manufacturing industries.....	22.3	2.9	(NA)	⁷ 25.2	⁷ 25.2	(X)	(NA)
1939 ⁸	12.9	¹⁰ 3.3	(NA)	(NA)	16.3	(X)	(NA)
1929 ⁸	12.8	¹⁰ 3.1	0.4	(NA)	15.9	(X)	(NA)
1919 ⁸	8.3	4.0	(NA)	12.3	12.3	(X)	(NA)
1909 ¹¹	7.1	2.4	(NA)	9.4	9.4	(X)	(NA)
1902 ⁸	4.7	¹⁰ 0.7	(NA)	(NA)	5.4	(X)	(NA)
1889 ⁸	1.8	0.3	(NA)	(NA)	2.0	(X)	(NA)
INDUSTRY 1492.--GYPSUM INDUSTRY AND GYPSUM MINES IN MANUFACTURES--Con.							
1967, total ²	30.3	4.1	(NA)	34.3	34.3	9,229.5	(NA)
Gypsum industry.....	7.4	2.2	0.4	9.3	9.3	3,017.3	0.6
Gypsum mines in manufactures.....	23.0	2.0	(NA)	⁷ 25.0	⁷ 25.0	6,212.2	(NA)
1963, total.....	33.6	5.7	(NA)	38.9	38.9	10,176.0	(NA)
Gypsum industry.....	7.8	2.8	0.9	10.2	10.2	3,246.0	1.3
Gypsum mines in manufactures.....	25.9	2.8	(NA)	⁷ 28.7	⁷ 28.7	6,930.0	(NA)
1958, total.....	29.8	4.7	(NA)	34.2	34.2	9,384.0	(NA)
Gypsum industry.....	6.0	1.3	0.6	7.0	7.0	2,569.0	0.8
Gypsum mines in manufactures.....	23.8	3.3	(NA)	⁷ 27.1	⁷ 27.1	6,815.0	(NA)
1954, total.....	27.6	4.2	(NA)	31.9	(NA)	9,057.0	(NA)
Gypsum industry.....	5.4	1.3	2.4	6.6	(NA)	2,487.0	2.4
Gypsum mines in manufactures.....	22.3	2.9	(NA)	⁷ 25.2	⁷ 25.2	6,570.0	(NA)
1939.....	3.8	¹⁰ 0.8	(NA)	(NA)	4.6	3,302.0	(NA)
1929 ¹³	4.5	¹⁰ 1.2	0.6	(NA)	5.7	5,152.0	(NA)
1919.....	4.6	2.2	(NA)	3.8	6.8	2,420.0	(NA)
1909.....	4.2	1.6	(NA)	5.8	5.8	2,253.0	(NA)
1902.....	1.7	¹⁰ 0.3	(NA)	(NA)	2.1	816.0	(NA)
1889.....	0.6	¹⁰ 0.1	(NA)	(NA)	0.8	268.0	(NA)
INDUSTRY 1493.--MICA--Con.							
1967 ²	5.3	1.5	0.3	6.7	(D)	¹⁵ 119,663.0	0.4
1963.....	3.9	2.0	0.5	5.6	(D)	¹⁵ 103,024.0	0.9
1958.....	5.0	1.8	0.6	6.2	6.2	¹⁵ 94,292.0	1.2
1954 ¹⁶	3.3	1.2	0.5	4.1	4.1	¹⁵ 59,068.0	0.9
1939.....	0.3	¹⁰ 0.1	(NA)	(NA)	0.3	¹⁵ 20,731.0	(NA)
1929 ¹³	0.4	¹⁰ 0.1	(Z)	(NA)	0.5	12,130.0	(NA)
1919 ¹³	0.5	0.1	(NA)	0.6	0.6	(NA)	(NA)
1909.....	0.2	(Z)	(NA)	0.2	0.2	(NA)	(NA)
1902.....	0.1	(Z)	(NA)	(NA)	0.1	¹⁵ 1,587.0	(NA)
1889.....	(Z)	(Z)	(NA)	0.1	0.1	¹⁵ 221.0	(NA)
1880.....	0.1	(Z)	(NA)	0.1	0.1	¹⁵ 41.0	(NA)

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)
INDUSTRY 1494.--NATIVE ASPHALT AND BITUMENS								
1967 ²	(NA)	12	7	0.5	3.0	0.4	0.8	2.2
1963	11	13	4	0.4	2.2	0.4	0.7	1.7
1958	8	10	5	0.5	2.3	0.4	0.7	1.4
1954	9	⁹ 12	7	0.6	2.1	0.5	1.0	1.4
1939	23	⁹ 23	(NA)	0.8	0.9	0.7	1.3	0.6
1929	(NA)	21	(NA)	1.3	1.8	1.1	(NA)	1.3
1919	(NA)	9	(NA)	0.4	0.4	0.3	(NA)	0.3
1909 ¹³	12	⁹ 12	(NA)	0.2	0.2	0.2	(NA)	0.1
1902	24	⁹ 24	(NA)	0.2	0.1	¹² 0.2	(NA)	0.1
1889 ¹⁷	(NA)	(NA)	(NA)	0.1	0.1	¹⁴ 0.1	(NA)	0.1
INDUSTRY 1495.--PUMICE AND PUMICITE								
1967 ²	(NA)	29	2	0.2	1.0	0.1	0.2	0.7
1963	83	85	1	0.2	1.1	0.2	0.4	1.0
1958	69	70	2	0.4	1.2	0.3	0.5	1.0
1954 ¹⁸	73	75	1	0.3	1.0	0.2	0.4	0.7
1939 ¹⁹	15	17	(NA)	0.1	0.1	0.1	0.2	0.1
INDUSTRY 1496.--TALC, SOAPSTONE, AND PYROPHYLLITE								
1967 ²	(NA)	53	18	1.2	7.4	1.1	2.3	5.8
1963	43	65	9	1.3	6.6	1.1	2.2	5.4
1958	43	64	12	1.3	5.3	1.1	2.3	4.2
1954	54	68	13	1.5	4.9	1.3	2.8	4.1
1939	29	⁹ 38	(NA)	1.1	1.2	1.0	2.1	0.8
1929	(NA)	25	(NA)	0.6	0.8	0.6	(NA)	0.6
1919	(NA)	28	(NA)	1.1	1.1	1.0	(NA)	0.8
1909	39	39	(NA)	1.4	0.6	1.3	(NA)	0.5
1902	20	⁹ 20	(NA)	0.8	0.3	¹² 0.8	(NA)	0.3
1889	(NA)	(NA)	(NA)	0.3	0.1	¹⁴ 0.3	(NA)	0.1
1880	(NA)	⁹ 14	(NA)	0.2	0.1	(NA)	(NA)	(NA)
1870	(NA)	9	(NA)	0.1	(Z)	(NA)	(NA)	(NA)
INDUSTRY 1497.--NATURAL ABRASIVES, EXCEPT SAND								
1967 ²	(NA)	20	5	0.3	2.2	0.2	0.5	1.4
1963	23	23	5	0.3	1.6	0.2	0.5	1.0
1958	20	20	4	0.2	1.0	0.2	0.4	0.8
1954	22	22	3	0.2	0.9	0.2	0.4	0.7
1939	27	⁹ 36	(NA)	0.4	0.5	0.4	0.8	0.3
1929 ¹⁹	(NA)	30	(NA)	0.5	0.7	0.5	(NA)	0.5
1919 ¹⁹	(NA)	34	(NA)	0.4	0.4	0.3	(NA)	0.3
1909 ²¹	63	⁹ 63	(NA)	0.8	0.3	0.8	(NA)	0.3
1902 ²¹	65	⁹ 71	(NA)	0.6	0.3	¹² 0.6	(NA)	0.3
1889 ²²	(NA)	(NA)	(NA)	0.5	0.1	0.4	(NA)	0.1
1880 ²³	(NA)	⁹ 45	(NA)	0.5	0.2	0.5	(NA)	0.2
1870 ²⁴	(NA)	35	(NA)	0.2	0.1	(NA)	(NA)	(NA)
1860 ²⁵	49	(NA)	(NA)	0.4	0.1	(NA)	(NA)	(NA)
1850 ²⁶	35	(NA)	(NA)	0.2	0.1	(NA)	(NA)	(NA)
INDUSTRY 1498.--PEAT								
1967 ²	(NA)	76	4	0.5	2.3	0.4	1.0	2.0
1963	108	109	4	0.5	1.8	0.4	0.9	1.5
1958	80	81	3	0.4	1.3	0.3	0.6	1.0
1954	86	88	3	0.4	0.9	0.3	0.6	0.8
1939 ¹³	23	⁹ 25	(NA)	0.2	0.1	0.2	0.2	0.1
1909 ¹³	10	10	(NA)	0.1	0.1	0.1	(NA)	(Z)

See footnotes at end of table.

TABLE 1. General Statistics: 1967 and Earlier Years--Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts (million dollars)	Quantity of primary products ¹ (1,000 short tons)	Capital expenditures (million dollars)
INDUSTRY 1494.--NATIVE ASPHALT AND BITUMENS--Con.							
1967 ²	5.8	3.4	0.3	8.7	8.7	(D)	0.8
1963.....	6.3	2.6	0.6	8.5	(D)	(D)	1.1
1958.....	6.0	2.3	0.5	8.0	8.0	1,615.0	0.7
1954.....	4.9	1.6	0.5	6.4	6.4	1,417.0	0.6
1939.....	2.6	¹ 0.4	(NA)	(NA)	3.0	495.0	(NA)
1929.....	4.3	¹ 0.8	0.2	(NA)	5.1	819.0	(NA)
1919.....	0.3	0.4	(NA)	0.8	0.8	(NA)	(NA)
1909 ¹³	0.4	0.1	(NA)	0.5	0.5	(NA)	(NA)
1902.....	0.2	(Z)	(NA)	(NA)	0.2	66.0	(NA)
1889 ¹⁷	0.2	(Z)	(NA)	(NA)	0.2	52.0	(NA)
INDUSTRY 1495.--PUMICE AND PUMICITE--Con.							
1967 ²	2.0	0.9	0.1	2.8	2.8	¹ 1,329.3	0.2
1963.....	4.2	1.3	0.5	5.4	5.3	¹ 2,308.0	0.7
1958.....	4.4	1.4	0.3	5.5	5.5	2,093.0	0.6
1954 ¹⁸	2.7	0.8	0.3	3.4	(NA)	1,818.0	0.4
1939 ¹⁹	0.3	0.1	(NA)	(NA)	0.4	87.0	(NA)
INDUSTRY 1496.--TALC, SOAPSTONE, AND PYROPHYLLITE--Con.							
1967 ²	16.9	4.9	1.2	21.3	(D)	980.9	1.7
1963.....	13.7	4.5	0.5	17.5	17.3	¹ 873.0	1.1
1958.....	11.8	3.5	0.5	14.9	(D)	726.0	0.9
1954.....	9.5	3.0	0.5	11.8	11.6	610.0	1.2
1939.....	2.4	¹ 0.8	(NA)	(NA)	3.3	254.0	(NA)
1929.....	2.0	¹ 0.7	(Z)	(NA)	1.7	243.0	(NA)
1919.....	1.7	0.6	(NA)	2.3	2.3	(NA)	(NA)
1909.....	0.9	0.3	(NA)	1.2	1.2	(NA)	(NA)
1902.....	1.0	¹ 0.1	(NA)	(NA)	1.1	98.0	(NA)
1889.....	0.4	(Z)	(NA)	(NA)	0.5	36.0	(NA)
1880.....	0.1	(Z)	(NA)	(NA)	0.1	13.0	(NA)
1870.....	0.1	0.1	(NA)	(NA)	0.2	(NA)	(NA)
INDUSTRY 1497.--NATURAL ABRASIVES, EXCEPT SAND--Con.							
1967 ²	4.3	² 0.8	(² 0)	5.7	5.7	104.8	1.4
1963.....	4.1	1.3	0.1	5.0	5.0	84.0	0.5
1958.....	2.6	0.8	0.1	3.4	3.4	¹ 66.0	0.1
1954.....	2.9	0.9	0.1	3.5	3.5	74.0	0.3
1939.....	1.1	¹ 0.2	(NA)	(NA)	1.3	44.0	(NA)
1929 ¹⁹	1.2	¹ 0.2	0.1	(NA)	1.4	90.0	(NA)
1919 ¹⁹	0.5	0.2	(NA)	0.7	0.7	(NA)	(NA)
1909 ²¹	0.6	0.2	(NA)	0.8	0.8	(NA)	(NA)
1902 ²¹	1.0	¹ 0.1	(NA)	(NA)	1.1	(NA)	(NA)
1889 ²²	0.2	(Z)	(NA)	0.3	0.3	(NA)	(NA)
1880 ²³	0.3	0.3	(NA)	0.6	0.6	(NA)	(NA)
1870 ²⁴	0.1	0.1	(NA)	0.2	0.2	(NA)	(NA)
1860 ²⁵	0.3	0.1	(NA)	0.4	0.4	(NA)	(NA)
1850 ²⁶	0.1	0.1	(NA)	0.2	0.2	(NA)	(NA)
INDUSTRY 1498.--PEAT--Con.							
1967 ²	6.7	² 0.3	(² 0)	8.5	8.5	¹ 587.2	0.5
1963.....	5.6	1.9	0.7	7.4	7.4	¹ 566.0	0.9
1958.....	3.6	1.1	0.4	4.4	4.4	¹ 366.0	0.8
1954.....	1.8	0.6	0.2	2.3	2.3	249.0	0.2
1939 ¹³	0.3	(Z)	(NA)	(NA)	0.4	56.0	(NA)
1909 ¹³	0.1	(Z)	(NA)	0.1	0.1	(NA)	(NA)

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Operating companies	Establishments		All employees		Production, development, and exploration workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
	(number)	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)
INDUSTRY 1499.--NONMETALLIC MINERALS, N.E.C.								
1967 ²	(NA)	135	32	2.9	20.9	2.3	4.9	15.3
1963.....	81	87	18	1.9	11.2	1.6	3.3	9.0
1958.....	47	55	17	1.8	8.6	1.3	3.0	6.0
1954.....	63	70	14	1.8	7.3	1.4	2.7	5.3
1939.....	⁵ 38	⁹ 37	(NA)	0.7	0.8	0.6	1.4	0.6

Note: Detail may not add to totals due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry. For gypsum and talc, soapstone, and pyrophyllite operations, represents production of crude material. Also represents production for native asphalt and bitumens; pumice and pumicite; natural abrasives, except sand; peat; asbestos; and diatomite. For mica and perlite represents shipments for 1967, 1963, 1958, and 1954, for earlier years represents production. For 1967 and 1963 for pumice and pumicite; talc, soapstone, and pyrophyllite; peat; and perlite; and for 1958 for natural abrasives, except sand, and peat includes production as a secondary product in other industries.

²In 1967, for the first time data for establishments without paid employees were excluded from the Census. In 1963 there were approximately 93 establishments without paid employees in industry 1481 and industry group 149; however, they accounted for less than 2 percent of the value added for industry 1481 and industry group 149. In industry 1481 and industry 1497, there were approximately 6 establishments in each industry without paid employees; in industry 1492, approximately 4 establishments; industry 1493, approximately 3 establishments; industry 1494, no establishments; industry 1495, approximately 23 establishments; industry 1496, approximately 12 establishments; industry 1498, approximately 28 establishments; and in industry 1499, there were approximately 11 establishments without paid employees. In industries 1481, 1492, 1493, 1494, 1496, 1497, and 1499, these establishments accounted for less than 1 percent of value added; in industry 1495, these establishments accounted for approximately 7 per cent of value added; and in industry 1498, these establishments accounted for less than 3 per cent of value added.

³Excludes the cost of subcontract work and products purchased for resale. For 1954, the cost of subcontract work was \$0.2 million and the cost of products purchased for resale \$0.1 million.

⁴Represents number of employees engaged in contract work and payments for contract as reported by companies operating nonmetallic minerals mines and quarries.

⁵Represents the sum of figures shown for separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.

⁶Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development, and exploration workers.

⁷Includes the estimated value of gypsum produced and used in the same establishment in the manufacture of calcined gypsum products.

⁸For 1939, figures other than number of companies and number of mines include data for 2 lithium mines which are classified in the Chemical and Fertilizer Mining, N.E.C., Industry. For 1929, 1919, 1902, and 1889 excludes data for the Peat Industry.

TABLE 1. General Statistics: 1967 and Earlier Years—Continued

(See appendix, Explanation of Terms)

Year and industry	Value added in mining (million dollars)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (million dollars)	Cost of purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Value of net shipments and receipts (million dollars)	Quantity of primary products ¹ (1,000 short tons)	Capital expenditures (million dollars)
INDUSTRY 1499.--NONMETALLIC MINERALS, N.E.C.--Con.							
1967 ²	62.8	26.1	4.7	88.9	(D)	(X)	4.7
1963.....	32.6	12.2	3.7	43.0	42.9	(X)	5.5
1958.....	23.4	9.6	2.9	31.6	(D)	(X)	4.2
1954.....	17.4	7.9	1.4	24.9	24.6	(X)	2.0
1939.....	2.2	¹ 0.9	(NA)	(NA)	3.0	(X)	(NA)

⁹Represents number of mines.¹⁰Excludes the cost of minerals received for preparation.¹¹The figures for number of operating companies and number of establishments include data for 9 nonproducing establishments for which other data are combined with figures for metal mining. See also footnote 13.¹²Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.¹³Excludes nonproducing establishments for which separate figures are not available as follows: 1939, Peat, 1 mine and 1 preparation plant; 1929, Gypsum 1, Mica 1, and Asbestos 1; 1919, Mica 1; and 1909, Native asphalt and bitumens 2; Peat 2; Diatomite 1, and Lithographic stone 2.¹⁴Represents the average number employed during the time the mines were active.¹⁵Represents short tons.¹⁶Excludes data for one establishment with no employees in Alaska.¹⁷Only two establishments were reported in the Native Asphalt and Bitumens Industry in 1880, and one establishment in 1870 and 1860.¹⁸Excludes data for 2 establishments with less than 5 employees in Hawaii.¹⁹For 1929 and 1919, figures for the Pumice and Pumicite Industry are included with those for the Natural Abrasives, Except Sand, Industry.

For 1929, figures for the Diatomite subindustry are included with those for the Natural Abrasives, Except Sand, Industry.

²⁰Cost of purchased machinery installed is included with the cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work.²¹For 1909, represents establishments primarily producing grindstones; buhrstones and millstones; oilstones, scythestones, and whetstones; corundum and emery; garnet; and tripoli. For 1902, represents establishments primarily producing grindstones and pulpstones; buhrstones and millstones; oilstones, whetstones, and scythestones; corundum and emery; garnet; and crystalline quartz. Excludes establishments primarily producing tripoli (these are included with the figures for the Diatomite subindustry); in 1909, the value of production of tripoli establishments represented 6 percent of the total value of production for the Natural Abrasives, Except Sand, Industry. For 1909, excludes data for 2 nonproducing establishments.²²Represents establishments primarily producing corundum, grindstones, millstones, and whetstones; for 1902, the value of shipments for such products amounted to 91 percent of the total shown for the Natural Abrasives Industry in that year.²³Represents establishments primarily producing corundum, garnet, grindstones, millstones, oilstones, scythestones, shoemakers' stones, and whetstones.²⁴Represents establishments primarily producing burr millstones, grindstones, and millstones only.²⁵Represents establishments primarily producing grindstones, millstones, whetstones, scythestones, whetstones, corundum, and emery.²⁶Represents establishments primarily producing grindstones, and millstones only. Such establishments accounted for about 80 percent of the total value of products shown for this industry for 1860.

TABLE 2A. General Statistics by Geographic Area and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation ¹	1967											1963	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1481.--NONMETALLIC MINERALS SERVICES													
United States, total.....	106	10	0.8	5.9	0.8	1.5	4.9	11.2	5.9	15.3	1.9	0.9	² 9.3
<u>Geographic Area</u>													
Northeast Region.....	11	1	0.1	0.9	0.1	0.1	0.6	1.8	0.6	2.3	0.1	(Z)	0.3
East North Central Division.....	18	1	0.1	0.8	0.1	0.2	0.7	1.3	0.7	1.7	0.3	0.1	0.7
Ohio.....	7	-	(Z)	0.4	(Z)	0.1	0.3	0.7	0.5	1.0	0.2	0.1	0.5
Indiana.....	3	1	(Z)	0.3	(Z)	0.1	0.3	0.2	0.1	0.3	(Z)	(NA)	(NA)
West North Central Division.....	19	-	0.1	0.3	0.1	0.1	0.3	0.7	0.4	1.0	0.2	0.1	1.3
South Atlantic Division.....	13	1	0.1	0.5	0.1	0.2	0.4	0.9	0.3	1.2	0.1	0.1	1.0
East South Central Division.....	5	1	0.1	0.5	0.1	0.1	0.4	1.3	0.5	1.7	0.1	0.1	1.0
West South Central Division.....	10	1	(Z)	0.2	(Z)	0.1	0.2	0.4	0.1	0.5	(Z)	(Z)	0.2
Mountain Division.....	17	4	0.2	1.8	0.2	0.5	1.6	3.4	2.0	4.6	0.8	0.2	3.5
Utah.....	5	1	0.1	0.5	0.1	0.1	0.5	0.8	0.4	1.2	(Z)	(NA)	(NA)
Pacific Division.....	13	1	0.1	0.8	0.1	0.2	0.8	1.5	1.2	2.4	0.3	0.1	1.3
<u>Services by Principal Industry Served</u>													
Stone, and sand and gravel, total.....	20	5	0.3	2.3	0.3	0.5	1.7	4.2	1.9	5.6	0.5	0.3	2.2
Stone.....	16	4	0.3	1.9	0.2	0.4	1.4	3.8	1.7	5.0	0.4	0.2	1.4
Sand and gravel.....	4	1	0.1	0.4	0.1	0.1	0.3	0.5	0.2	0.6	0.1	0.1	0.8
Clay and related minerals.....	64	1	0.2	0.9	0.2	0.3	0.8	2.1	1.0	2.8	0.2	0.3	2.6
Chemical and fertilizer minerals.....	22	4	0.3	2.7	0.3	0.7	2.4	4.9	3.1	6.8	1.1	0.3	4.5
Miscellaneous nonmetallic minerals.....													
Nonproducers.....													
INDUSTRY 1492.--GYPSUM													
United States.....	33	5	0.4	2.3	0.3	0.7	1.9	7.4	2.5	9.3	0.6	0.5	7.8
<u>Geographic Area</u>													
Oklahoma.....	4	-	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.7	1.0	0.1	(NA)	(NA)
West Region.....	22	1	0.1	0.6	0.1	0.2	0.5	2.3	0.7	2.7	0.3	0.2	2.9
Mountain Division.....	14	-	0.1	0.3	(Z)	0.1	0.2	1.0	0.3	1.2	0.2	0.1	1.1
Pacific Division.....	8	1	0.1	0.4	(Z)	0.1	0.2	1.3	0.4	1.6	0.1	0.1	1.8
<u>Type of Operation</u>													
Producing open-pit mines with preparation plants.....	16	4	0.3	1.9	0.3	0.6	1.5	5.9	1.8	7.3	0.4	0.3	5.0
Other operations.....	17	1	0.1	0.4	0.1	0.1	0.3	1.4	0.8	2.0	0.2	0.3	5.7
INDUSTRY 1493.--MICA													
United States.....	20	5	0.3	1.8	0.3	0.5	1.2	5.3	1.9	6.7	0.4	0.4	3.9
<u>Geographic Area</u>													
South Region.....	14	4	0.3	1.3	0.2	0.5	0.9	3.0	1.6	4.3	0.3	0.3	3.4
North Carolina.....	10	3	0.2	0.9	0.1	0.3	0.6	1.6	1.1	2.6	0.1	0.2	2.1
<u>Type of Operation</u>													
Open-pit mines with preparation plants..	13	5	0.3	1.7	0.2	0.5	1.2	5.2	1.8	6.5	0.4	0.3	3.3
INDUSTRY 1494.--NATIVE ASPHALT AND BITUMENS													
United States.....	12	7	0.5	3.0	0.4	0.8	2.2	5.8	³ 3.7	8.7	0.8	0.4	6.3
INDUSTRY 1495.--PUMICE AND PUMICITE													
United States.....	29	2	0.2	1.0	0.1	0.2	0.7	2.0	1.0	2.8	0.2	0.2	4.2
<u>Geographic Area</u>													
Mountain Division.....	13	-	(Z)	0.2	(Z)	0.1	0.2	0.6	0.2	0.8	0.1	0.1	2.0
Pacific Division.....	12	2	0.1	0.7	0.1	0.2	0.5	1.3	0.7	1.9	0.1	0.1	2.1
<u>Type of Operation</u>													
Producing open-pit mines with preparation plants.....	23	2	0.2	0.9	0.1	0.2	0.7	1.9	0.9	2.6	0.2	0.2	2.8

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Area and Type of of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Industry, geographic area, and type of operation ¹	1967										1963		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)						
INDUSTRY 1496.--TALC, SOAPSTONE, AND PYROPHYLLITE													
United States, total.....	53	18	1.2	7.4	1.1	2.3	5.8	16.9	6.1	21.3	1.7	1.3	13.7
<u>Geographic Area</u>													
Northeast Region.....	12	6	0.4	3.0	0.3	0.7	2.2	7.3	2.3	8.9	0.7	0.4	6.3
South Atlantic Division.....	15	6	0.5	2.2	0.4	0.9	1.9	4.9	1.1	5.8	0.2	⁴ 0.7	⁴ 4.9
East and West South Central Divisions...	5	2	0.1	0.5	0.1	0.2	0.5	1.8	1.1	2.6	0.3	(⁴)	(⁴)
West Region.....	21	4	0.2	1.6	0.2	0.4	1.3	2.9	1.6	4.0	0.5	0.2	2.5
<u>Type of Operation</u>													
Mines only:													
Underground.....	15	1	0.1	0.9	0.1	0.2	0.7	2.3	0.6	2.7	0.1	(NA)	(NA)
Mines with preparation plants:													
Underground.....	13	11	0.6	3.7	0.5	1.1	3.1	9.0	3.6	11.5	1.1	0.3	5.1
Open-pit.....	10	4	0.4	2.0	0.4	0.8	1.7	4.7	1.5	5.9	0.3	0.5	4.0
INDUSTRY 1497.--ABRASIVES, EXCEPT SAND													
United States.....	20	5	0.3	2.2	0.2	0.5	1.4	4.3	2.8	5.7	1.4	0.3	4.1
<u>Geographic Area</u>													
Middle Atlantic Division and North Central Region.....	13	5	0.3	1.9	0.2	0.4	1.3	3.7	2.6	5.0	1.3	0.3	3.8
<u>Type of Operation</u>													
Producing mines with preparation plants	9	3	0.3	1.6	0.2	0.4	1.3	4.0	2.7	5.3	1.3	0.3	4.0
INDUSTRY 1498.--PEAT													
United States.....	76	4	0.5	2.3	0.4	1.0	2.0	6.7	2.3	8.5	0.5	0.5	5.6
<u>Geographic Area</u>													
Northeast Region.....	19	-	0.1	0.4	0.1	0.1	0.3	0.8	0.5	1.2	0.1	0.1	0.6
North Central Region.....	28	4	0.3	1.5	0.3	0.7	1.3	4.7	1.4	5.8	0.3	0.3	4.1
South Region and West Region.....	29	-	0.1	0.4	0.1	0.2	0.4	1.2	0.4	1.5	0.1	0.1	0.9
<u>Type of Operation</u>													
Open-pit mines with preparation plants.	24	3	0.3	1.3	0.2	0.6	1.2	4.6	1.4	5.7	0.3	0.3	3.4
INDUSTRY 1499.--NONMETALLIC MINERALS, N.E.C.													
United States.....	135	32	2.9	20.9	2.3	4.9	15.3	62.8	30.8	88.9	4.7	1.9	32.6
<u>Geographic Area</u>													
Diatomite subindustry.....	10	6	0.9	7.5	0.7	1.6	5.9	29.3	9.9	37.1	2.0	0.8	21.8
Perlite subindustry.....	8	2	0.1	0.7	0.1	0.3	0.6	3.7	1.0	4.4	0.3	0.2	2.7
Shell subindustry.....	13	10	0.8	4.9	0.6	1.3	3.7	15.9	10.4	25.5	0.9	(NA)	(NA)
Other nonmetallic minerals, n.e.c. ⁵	104	14	1.2	7.8	0.9	1.8	5.1	13.9	9.5	21.9	1.4	0.8	8.1
<u>Geographic Area</u>													
West South Central Division.....	15	9	0.6	4.4	0.4	1.0	2.7	11.0	9.5	19.7	0.8	0.1	0.7
Mountain Division.....	34	7	0.5	3.4	0.4	1.0	3.0	11.4	4.5	14.5	1.3	0.5	7.5
Arizona.....	6	1	0.1	0.3	0.1	0.1	0.2	0.7	0.2	0.9	(Z)	(NA)	(NA)
Pacific Division.....	27	7	1.0	8.3	0.8	1.8	6.4	27.8	12.7	38.8	1.7	0.9	19.8
<u>Type of Operation</u>													
Producing open-pit mines with preparation plants.....	104	18	1.9	14.0	1.6	3.5	11.3	45.8	19.7	62.0	3.5	1.8	31.9

Note: Detail may not add to totals due to independent rounding.

Standard notes: -Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.

¹General statistics for most States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics.²In 1963, service establishments were permitted to prepare one report for all mining services performed in the United States. However, these reports contained data for total receipts for services, total employment on March 15, and capital expenditures by state and county. Value added by geographic area was obtained by allocating the totals reported by each company on the basis of the reported county data.³Excludes minerals received for preparation.⁴Figures for East and West South Central Divisions are included with those for South Atlantic.⁵Represents such minerals as asbestos, vermiculite, graphite, gemstones, staurolite, and greensand.

TABLE 2B. General Statistics for Manufacturing Establishments With Mining Operations by Geographic Area: 1967 and 1963

(See appendix, Explanation of Terms)

Industry and geographic area	1967											1963	
	Establishments		All employees		Production, development and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts ²	Capital expenditures	All employees ¹	Value added in mining
	Total	With 20 employees or more	Number ¹	Payroll ¹	Number ¹	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	GYPSUM MINES INCLUDED IN MANUFACTURES												
United States, total.....	34	7	0.5	2.9	0.5	1.0	2.9	23.0	2.0	25.0	(NA)	0.7	25.9
Middle Atlantic Division (New York)....	4	1	0.1	0.5	0.1	0.2	0.5	1.6	0.4	2.0	(NA)	(NA)	(NA)
East North Central Division.....	6	3	0.1	0.8	0.1	0.3	0.8	4.7	0.5	5.2	(NA)	0.1	5.0
West North Central Division.....	7	1	0.1	0.4	0.1	0.2	0.4	5.9	0.3	6.2	(NA)	0.1	6.4
South Region.....	9	2	0.2	0.8	0.2	0.3	0.8	6.7	0.6	7.3	(NA)	0.2	6.0
Texas.....	5	-	(Z)	0.2	(Z)	0.1	0.2	3.6	0.2	3.7	(NA)	(NA)	(NA)
West Region.....	8	-	0.1	0.3	0.1	0.1	0.3	4.1	0.2	4.3	(NA)	0.1	7.0

Note: Detail may not add to the total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than 50 employees.

¹The number of production, development and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same employment and payroll figures are shown for all employees as for production, development and exploration workers.²Includes the estimated value of gypsum produced and used in the same establishment in the manufacture of calcined gypsum products.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967

Item	1481.-Non-metallic minerals services industry	149.-Miscellaneous nonmetallic minerals industries						
		Total	1492.-Gypsum industry		1493.-Mica industry		1494.-Native asphalt and bitumens industry	1495.-Pumice and pumicite industry
			United States, all operations	Producing open-pit mines with preparation plants	United States, all operations	Producing open-pit mines with preparation plants		
Establishments, total.....number..	106	378	33	16	20	13	12	29
With 1 to 19 employees.....do....	96	300	28	12	15	8	5	27
With 20 to 99 employees.....do....	10	66	5	4	5	5	6	2
With 100 employees or more.....do....	-	12	-	-	-	-	1	-
All employees (average for the year).....1,000..	0.8	6.4	0.4	0.3	0.3	0.3	0.5	0.2
Payroll (all employees), total for year..million dollars..	5.9	41.0	2.3	1.9	1.8	1.7	3.0	1.0
Production, development, and exploration workers:								
Average for the year.....1,000..	0.8	5.2	0.3	0.3	0.3	0.2	0.4	0.1
March.....do....	0.7	5.1	0.3	0.3	0.3	0.2	0.4	0.1
May.....do....	0.8	5.3	0.3	0.3	0.3	0.2	0.4	0.1
August.....do....	0.8	5.3	0.4	0.3	0.2	0.2	0.4	0.2
November.....do....	0.7	5.0	0.3	0.3	0.3	0.2	0.4	0.2
Man-hours.....millions..	1.5	11.0	0.7	0.6	0.5	0.5	0.8	0.2
January-March.....do....	0.3	2.7	0.2	0.1	0.1	0.1	0.2	0.1
April-June.....do....	0.4	2.8	0.2	0.1	0.1	0.1	0.2	0.1
July-September.....do....	0.4	2.8	0.2	0.1	0.1	0.1	0.2	0.1
October-December.....do....	0.4	2.6	0.2	0.1	0.1	0.1	0.2	0.1
Wages.....million dollars..	4.9	30.6	1.9	1.5	1.2	1.2	2.2	0.7
Supplemental labor cost not included in payroll.....do....	0.4	3.3	0.2	0.1	0.2	0.2	0.3	0.1
Legally required expenditures, including Social Security contributions.....do....	0.3	2.0	0.1	0.1	0.2	0.2	0.1	0.1
Payments for voluntary programs.....do....	0.1	1.3	(Z)	(Z)	0.1	(Z)	0.1	(Z)
Cost of supplies, etc., total.....do....	5.9	51.0	2.5	1.8	1.9	1.8	3.7	1.0
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	4.8	33.3	2.0	1.4	1.2	1.1	2.3	0.5
Cost of resales.....do....	(Z)	2.0	-	-	(D)	(D)	(Z)	(Z)
Purchased fuels consumed.....do....	0.7	4.9	0.2	0.2	0.2	0.2	0.2	0.1
Electric energy:								
Purchased:								
Quantity.....million kw.-hrs..	6.6	297.6	8.9	7.3	16.2	14.2	25.9	1.6
Cost.....million dollars..	0.1	3.5	0.1	0.1	0.2	0.2	0.3	0.1
Generated less sold.....million kw.-hrs..	-	(NA)	(NA)	(NA)	-	-	-	(Z)
Contract work.....million dollars..	0.4	7.3	0.2	0.2	(D)	(D)	0.9	0.3
Value of shipments and receipts (including resales), total.....do....	15.3	151.9	9.3	7.3	6.7	6.5	8.7	2.8
Value of resales.....do....	(Z)	2.3	-	-	(D)	(D)	(Z)	(Z)
Value added in mining.....do....	11.2	111.1	7.4	5.9	5.3	5.2	5.8	2.0
Capital expenditures (except land and mineral rights), total.....do....	1.9	10.5	0.6	0.4	0.4	0.4	0.8	0.2
Mineral development and exploration.....do....	(Z)	0.8	0.1	(Z)	(Z)	(Z)	0.3	(Z)
New structures and additions.....do....	0.2	1.0	(Z)	(Z)	0.1	0.1	(Z)	(Z)
New machinery and equipment.....do....	1.4	7.8	0.3	0.2	0.3	0.3	0.3	0.2
Used plant and equipment.....do....	0.2	0.9	0.2	0.2	(Z)	(Z)	0.1	(Z)
Gross book value of fixed assets, total.....do....	12.7	144.6	17.8	16.1	5.6	5.0	7.1	1.5
Mineral properties.....do....	(Z)	20.1	1.2	1.1	0.6	0.5	0.7	0.1
Building and other structures (excluding land).....do....	1.3	33.6	5.0	4.9	1.0	0.8	2.6	0.3
Machinery and equipment.....do....	11.4	90.9	11.7	10.1	4.0	3.7	3.7	1.1
Mineral development and exploration expenditures, total.....do....	(Z)	1.7	0.1	(Z)	(Z)	(Z)	0.6	(Z)
Capitalized.....do....	(Z)	0.7	0.1	(Z)	(Z)	(Z)	0.3	(Z)
Expensed.....do....	-	1.0	(Z)	(Z)	-	-	0.2	(Z)
Mineral rights and geological expenditures.....do....	-	0.8	(Z)	(Z)	0.1	(Z)	(Z)	(Z)
Lease and land acquisition of nonproducing acreage.....do....	-	0.1	-	-	(Z)	(Z)	(Z)	(Z)
Geological and geophysical.....do....	-	(Z)	(Z)	(Z)	-	-	(Z)	(Z)
Lease rents.....do....	-	0.7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Net shipments of primary product ¹.....1,000 short tons..	(X)	(X)	(D)	(NA)	(D)	(D)	(D)	1,322.1
Crude minerals mined during 1967, by ownership.....do....	(X)	(X)	2,933.4	2,396.7	134.0	(NA)	(NA)	1,332.8
Production for own account.....do....	(X)	(X)	930.7	811.9	15.9	(NA)	(NA)	439.9
Production for accounts of others.....do....	(X)	(X)	185.8	165.5	-	-	(NA)	-
Royalty production.....do....	(X)	(X)	785.7	557.7	72.2	(NA)	(NA)	(²)
Royalties paid.....million dollars..	(X)	(X)	0.2	0.2	0.1	(NA)	(NA)	(D)
Undistributed.....1,000 short tons..	(X)	(X)	1,031.1	861.7	45.9	(NA)	(NA)	² 892.9
Man-hours worked by production, development, and exploration workers, total.....millions..	1.5	11.0	0.7	0.6	0.5	0.5	0.8	0.2
At mines, total.....do....	(X)	5.7	0.5	0.4	0.1	0.1	0.5	0.2
Underground.....do....	³ 0.2	1.5	(Z)	-	-	-	0.3	-
Open-pit.....do....	⁴ 0.3	2.8	0.4	0.4	0.1	0.1	0.2	0.1
Surface (including mine shops and yards).....do....	⁵ 0.4	1.3	(Z)	(Z)	(Z)	(Z)	0.1	(Z)
At preparation plants.....do....	⁶ 0.6	5.3	0.2	0.2	0.4	0.4	0.3	0.1
Man-hours spent on exploration and development (included above).....do....	(NA)	0.2	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	149.-Miscellaneous nonmetallic minerals industries--Continued						
	1496.-Talc, soapstone, and pyrophyllite industry				1497.- Natural abrasives, except sand, industry	1498.-Peat industry	
	United States, all operations	Northeast region	South region	Underground mines with preparation plants		United States, all operations	North central region
Establishments, total.....number..	53	12	20	13	20	76	28
With 1 to 19 employees.....do....	35	6	12	2	15	72	24
With 20 to 99 employees.....do....	16	5	7	10	4	4	4
With 100 employees or more.....do....	2	1	1	1	1	-	-
All employees (average for the year).....1,000..	1.2	0.4	0.6	0.6	0.3	0.5	0.3
Payroll (all employees), total for year..million dollars..	7.4	3.0	2.7	3.7	2.2	2.3	1.5
Production, development, and exploration workers:							
Average for the year.....1,000..	1.1	0.3	0.5	0.5	0.2	0.4	0.3
March.....do....	1.0	0.3	0.5	0.5	0.2	0.4	0.3
May.....do....	1.1	0.4	0.5	0.5	0.3	0.5	0.3
August.....do....	1.1	0.3	0.5	0.5	0.3	0.5	0.3
November.....do....	1.0	0.3	0.6	0.5	0.2	0.4	0.2
Man-hours.....millions..	2.3	0.7	1.1	1.1	0.5	1.0	0.7
January-March.....do....	0.6	0.2	0.3	0.3	0.1	0.2	0.2
April-June.....do....	0.6	0.2	0.3	0.3	0.1	0.3	0.2
July-September.....do....	0.6	0.2	0.3	0.3	0.1	0.3	0.2
October-December.....do....	0.5	0.2	0.3	0.3	0.1	0.2	0.1
Wages.....million dollars..	5.8	2.2	2.3	3.1	1.4	2.0	1.3
Supplemental labor cost not included in payroll.....do....	0.7	0.4	0.2	0.4	0.1	0.1	(Z)
Legally required expenditures, including Social							
Security contributions.....do....	0.4	0.2	0.1	0.2	0.1	(Z)	(Z)
Payments for voluntary programs.....do....	0.3	0.2	0.1	0.2	0.1	(Z)	(Z)
Cost of supplies, etc., total.....do....	6.1	2.3	2.2	3.6	2.8	2.3	1.4
Supplies used, minerals received for preparation,							
and purchased machinery installed.....do....	4.8	1.7	1.6	2.8	2.4	1.8	1.1
Cost of resales.....do....	(D)	-	0.1	-	(Z)	(D)	(D)
Purchased fuels consumed.....do....	0.4	0.2	0.2	0.3	0.2	0.2	0.1
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	64.6	40.8	21.5	47.6	10.7	2.8	1.1
Cost.....million dollars..	0.7	0.5	0.2	0.5	0.2	(D)	(D)
Generated less sold.....million kw.-hrs..	(NA)	-	-	-	(Z)	-	-
Contract work.....million dollars..	(D)	(Z)	0.1	(Z)	(Z)	0.2	0.1
Value of shipments and receipts (including resales),							
total.....do....	21.3	8.9	8.4	11.5	5.7	8.5	5.8
Value of resales.....do....	(D)	-	0.1	-	(Z)	(D)	(D)
Value added in mining.....do....	16.9	7.3	6.7	9.0	4.3	6.7	4.7
Capital expenditures (except land and mineral rights),							
total.....do....	1.7	0.7	0.4	1.1	1.4	0.5	0.3
Mineral development and exploration.....do....	0.2	0.1	0.1	0.1	(Z)	(Z)	(Z)
New structures and additions.....do....	0.2	0.2	(Z)	0.2	(Z)	(Z)	(Z)
New machinery and equipment.....do....	1.2	0.4	0.3	0.8	1.3	0.4	0.2
Used plant and equipment.....do....	0.1	(Z)	0.1	(Z)	(Z)	0.1	0.1
Gross book value of fixed assets, total.....do....	20.0	7.8	6.2	12.7	8.4	4.7	2.2
Mineral properties.....do....	3.0	0.3	0.6	2.3	0.3	0.5	0.3
Building and other structures (excluding land).....do....	3.9	2.5	1.1	2.7	2.5	0.5	0.3
Machinery and equipment.....do....	13.0	5.0	4.5	7.7	5.6	3.6	1.6
Mineral development and exploration expenditures,							
total.....do....	0.3	0.1	(Z)	0.1	(Z)	(Z)	(Z)
Capitalized.....do....	0.2	0.1	(Z)	0.1	(Z)	(Z)	(Z)
Expensed.....do....	0.1	(Z)	-	(Z)	-	-	-
Mineral rights and geological expenditures.....do....	0.1	(Z)	(Z)	0.1	-	(Z)	(Z)
Lease and land acquisition of nonproducing acreage.....do....	(Z)	-	-	(Z)	-	(Z)	(Z)
Geological and geophysical.....do....	-	-	-	-	-	-	-
Lease rents.....do....	0.1	(Z)	(Z)	(Z)	-	(Z)	-
Net shipments of primary product ¹.....1,000 short tons..	980.9	421.6	320.6	(NA)	103.2	587.6	325.9
Crude minerals mined during 1967, by ownership.....do....	967.5	411.6	320.2	466.3	211.9	587.2	325.9
Production for own account.....do....	256.2	103.6	75.5	89.1	175.3	62.1	33.1
Production for accounts of others.....do....	0.3	-	-	0.3	-	-	-
Royalty production.....do....	516.8	239.7	212.3	296.5	24.2	74.0	68.0
Royalties paid.....million dollars..	0.3	0.1	0.1	0.2	(Z)	0.1	0.1
Undistributed.....1,000 short tons..	194.3	68.3	32.4	80.4	12.5	451.1	224.8
Man-hours worked by production, development, and							
exploration workers, total.....millions..	2.3	0.7	1.1	1.1	0.5	1.0	0.7
At mines, total.....do....	1.1	0.3	0.5	0.5	0.2	0.6	0.3
Underground.....do....	0.7	0.3	0.2	0.4	(Z)	-	-
Open-pit.....do....	0.3	(Z)	0.2	-	0.1	0.6	0.3
Surface (including mine shops and yards).....do....	0.1	(Z)	0.1	0.1	-	(Z)	(Z)
At preparation plants.....do....	1.2	0.4	0.7	0.6	0.3	0.4	0.3
Man-hours spent on exploration and development							
(included above).....do....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

TABLE 3. Detailed Statistics, by Selected Geographic Areas and Type of Operations: 1967-Continued

Item	149.-Miscellaneous nonmetallic minerals industries--Continued						
	1499.-Nonmetallic minerals, n.e.c., industry						
	United States, all operations	Mountain division	Pacific division	Producing open-pit mines with preparation plants	Subindustries		
					Diatomite	Shell	Other nonmetallic minerals, n.e.c.
Establishments, total.....number..	135	34	27	104	10	13	112
With 1 to 19 employees.....do....	103	27	20	86	4	3	96
With 20 to 99 employees.....do....	24	6	4	13	4	7	13
With 100 employees or more.....do....	8	1	3	5	2	3	3
All employees (average for the year).....1,000..	2.9	0.5	1.0	1.9	0.9	0.8	1.3
Payroll (all employees), total for year..million dollars..	20.9	3.4	8.3	14.0	7.5	4.9	8.4
Production, development, and exploration workers:							
Average for the year.....1,000..	2.3	0.4	0.8	1.6	0.7	0.6	1.0
March.....do....	2.3	0.4	0.8	1.6	0.7	0.6	1.0
May.....do....	2.3	0.4	0.8	1.6	0.7	0.6	1.0
August.....do....	2.3	0.4	0.8	1.6	0.7	0.6	1.0
November.....do....	2.3	0.4	0.8	1.6	0.7	0.6	0.9
Man-hours.....millions..	4.9	1.0	1.8	3.5	1.6	1.3	2.0
January-March.....do....	1.2	0.2	0.4	0.8	0.4	0.3	0.5
April-June.....do....	1.3	0.3	0.4	0.9	0.4	0.3	0.5
July-September.....do....	1.3	0.2	0.4	0.9	0.4	0.3	0.5
October-December.....do....	1.2	0.2	0.4	0.8	0.4	0.3	0.5
Wages.....million dollars..	15.3	3.0	6.4	11.3	5.9	3.7	5.7
Supplemental labor cost not included in payroll.....do....	1.7	0.3	1.0	1.5	0.8	0.1	0.7
Legally required expenditures, including Social Security contributions.....do....	0.9	0.2	0.5	0.8	0.4	0.1	0.5
Payments for voluntary programs.....do....	0.7	0.1	0.5	0.7	0.4	(Z)	0.3
Cost of supplies, etc., total.....do....	30.8	4.5	12.7	19.7	9.9	10.4	10.4
Supplies used, minerals received for preparation, and purchased machinery installed.....do....	18.4	2.8	8.0	12.5	6.5	5.4	6.5
Cost of resales.....do....	(D)	(Z)	-	-	-	(D)	(D)
Purchased fuels consumed.....do....	3.3	0.6	1.1	2.0	1.2	1.3	0.9
Electric energy:							
Purchased:							
Quantity.....million kw.-hrs..	166.9	33.5	94.3	158.8	84.7	7.2	75.1
Cost.....million dollars..	(D)	0.4	1.0	1.7	0.9	(D)	(D)
Generated less sold.....million kw.-hrs..	(Z)	-	-	-	-	(Z)	-
Contract work.....million dollars..	5.5	0.7	2.6	3.6	1.2	2.0	2.3
Value of shipments and receipts (including resales), total.....do....	88.9	14.5	38.8	62.0	37.1	25.5	26.3
Value of resales.....do....	(D)	(Z)	-	-	-	(D)	(D)
Value added in mining.....do....	62.8	11.4	27.8	45.8	29.3	15.9	17.6
Capital expenditures (except land and mineral rights), total.....do....	4.7	1.3	1.7	3.5	2.0	0.9	1.7
Mineral development and exploration.....do....	0.2	0.1	(Z)	0.1	(Z)	(Z)	0.1
New structures and additions.....do....	0.5	0.3	0.1	0.4	0.2	0.1	0.2
New machinery and equipment.....do....	3.7	1.0	1.4	2.8	1.7	0.7	1.2
Used plant and equipment.....do....	0.4	(Z)	0.2	0.3	0.1	0.1	0.2
Gross book value of fixed assets, total.....do....	79.4	15.3	46.1	70.1	34.5	6.8	38.1
Mineral properties.....do....	13.5	0.8	11.6	12.8	5.7	0.1	7.8
Building and other structures (excluding land).....do....	17.8	3.7	8.7	14.2	6.6	3.1	8.1
Machinery and equipment.....do....	48.1	10.9	25.8	43.1	22.2	3.7	22.2
Mineral development and exploration expenditures, total.....do....	0.7	(Z)	0.1	0.6	(Z)	(Z)	0.7
Capitalized.....do....	0.1	(Z)	(Z)	0.1	(Z)	-	0.1
Expensed.....do....	0.6	(Z)	0.1	0.5	(Z)	(Z)	0.6
Mineral rights and geological expenditures.....do....	0.5	(Z)	0.1	0.1	(Z)	(NA)	0.1
Lease and land acquisition of nonproducing acreage.....do....	(Z)	-	(Z)	(Z)	-	(Z)	(Z)
Geological and geophysical.....do....	(Z)	-	(Z)	(Z)	-	-	(Z)
Lease rents.....do....	0.5	(Z)	0.1	0.1	(Z)	(NA)	0.1
Net shipments of primary product ¹.....1,000 short tons..	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Crude minerals mined during 1967, by ownership.....do....	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Production for own account.....do....	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Production for accounts of others.....do....	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Royalty production.....do....	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Royalties paid.....million dollars..	1.2	(D)	(D)	(D)	(D)	(D)	(D)
Undistributed.....1,000 short tons..	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Man-hours worked by production, development, and exploration workers, total.....millions..	4.9	1.0	1.8	3.5	1.6	1.3	2.0
At mines, total.....do....	2.5	0.4	1.1	1.7	1.0	0.8	0.7
Underground.....do....	0.4	(Z)	-	-	-	0.4	(Z)
Open-pit.....do....	1.0	0.2	0.2	0.6	0.2	0.3	0.5
Surface (including mine shops and yards).....do....	1.0	0.2	0.8	1.0	0.8	(Z)	0.2
At preparation plants.....do....	2.4	0.5	0.7	1.8	0.6	0.6	1.2
Man-hours spent on exploration and development (included above).....do....	0.1	(Z)	-	(Z)	(Z)	(Z)	0.1

Note: Detail may not add to the total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than one half the unit of measure specified. n.e.c. Not elsewhere classified.

¹Represents the product indicated by the name of the industry. For gypsum and talc, soapstone, and pyrophyllite, represents production of crude material. For pumice and pumicite; talc, soapstone, and pyrophyllite; peat; and perlite includes production as a secondary product in other industries, amounting to less than 5 percent of the product total.²Royalty production is included with undistributed production.³For the Nonmetallic Minerals Services Industry represents man-hours on exploration work, including geophysical and other exploratory surveying.⁴For the Nonmetallic Minerals Services Industry represents man-hours on stripping overburden.⁵For the Nonmetallic Minerals Services Industry represents man-hours on mining minerals for the account of others.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967

(See appendix, Explanation of Terms)

	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1481	Nonmetallic Minerals Services:										
	Establishments, total.....	106	0.8	5.9	0.8	1.5	4.9	11.2	5.9	15.3	1.9
	Establishments with an average of-										
	0 to 4 employees.....	64	0.1	0.6	0.1	0.2	0.5	1.3	0.7	1.8	0.2
	5 to 9 employees.....	21	0.2	0.9	0.1	0.3	0.8	1.9	0.9	2.5	0.3
	10 to 19 employees.....	11	0.1	1.0	0.1	0.2	0.7	2.0	1.1	2.7	0.4
	20 to 49 employees.....	7	0.4	3.4	0.4	0.8	2.9	6.0	3.2	8.3	1.0
	50 to 99 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	37	(Z)	0.2	(Z)	0.1	0.2	0.5	0.3	0.8	0.1
1492	Gypsum:										
	Establishments, total.....	33	0.4	2.3	0.3	0.7	1.9	7.4	2.5	9.3	0.6
	Establishments with an average of-										
	0 to 4 employees.....	14	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.5	0.8	0.1
	5 to 9 employees.....	9	0.1	0.4	(Z)	0.1	0.3	1.4	0.6	1.8	0.2
	10 to 19 employees.....	5	0.1	0.4	0.1	0.1	0.3	1.4	0.5	1.7	0.2
	20 to 49 employees.....	3	0.3	1.5	0.2	0.4	1.2	4.3	0.8	4.9	0.2
	50 to 99 employees.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	9	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.1	0.2	(Z)
1493	Mica:										
	Establishments, total.....	20	0.3	1.8	0.3	0.5	1.2	5.3	1.9	6.7	0.4
	Establishments with an average of-										
	0 to 4 employees.....	9	(Z)	0.1	0.1	(Z)	(Z)	0.5	0.1	0.6	(Z)
	5 to 9 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	10 to 19 employees.....	5	0.1	0.3	0.1	0.1	0.2	0.8	0.4	1.1	(Z)
	20 to 49 employees.....	4	0.3	1.3	0.1	0.4	1.0	4.1	1.3	5.0	0.3
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)
1494	Native asphalt and bitumens:										
	Establishments, total.....	12	0.5	3.0	0.4	0.8	2.2	5.8	3.7	8.7	0.8
	Establishments with an average of-										
	0 to 4 employees.....	2	(Z)	0.4	(Z)	0.1	0.2	0.3	0.1	0.5	(Z)
	10 to 19 employees.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	20 to 49 employees.....	4	0.1	0.7	0.1	0.2	0.4	1.2	0.5	1.6	(Z)
	50 to 99 employees.....	2	0.4	2.1	0.2	0.6	1.6	4.3	3.1	6.6	0.7
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1495	Pumice and pumicite:										
	Establishments, total.....	29	0.2	1.0	0.1	0.2	0.7	2.0	1.0	2.8	0.2
	Establishments with an average of-										
	0 to 4 employees.....	19	(Z)	0.1	(Z)	(Z)	0.1	0.4	0.2	0.6	(Z)
	5 to 9 employees.....	6	(Z)	0.2	(Z)	0.1	0.2	0.6	0.1	0.6	0.1
	10 to 19 employees.....	2	0.2	0.6	0.1	0.2	0.4	1.1	0.7	1.6	0.1
	20 to 49 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	11	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.1	0.4	(Z)
1496	Talc, soapstone, and pyrophyllite:										
	Establishments, total.....	53	1.2	7.4	1.1	2.3	5.8	16.9	6.1	21.3	1.7
	Establishments with an average of-										
	0 to 4 employees.....	18	(Z)	0.2	(Z)	0.1	0.2	0.4	0.1	0.5	(Z)
	5 to 9 employees.....	4	(Z)	0.2	(Z)	(Z)	0.2	0.6	0.1	0.7	(Z)
	10 to 19 employees.....	13	0.2	1.2	0.1	0.3	0.7	2.4	0.7	3.0	0.2
	20 to 49 employees.....	12	0.4	2.2	0.3	0.7	1.6	4.9	2.3	5.8	0.6
	50 to 99 employees.....	4	0.6	3.7	0.5	1.2	3.3	9.4	2.7	11.3	0.8
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	250 to 499 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	5	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(Z)

See footnotes at end of table.

TABLE 4. General Statistics, by Employment Size of Establishment: 1967—Continued

(See appendix, Explanation of Terms)

	Item	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (million dollars)	Cost of supplies, etc., and purchased machinery installed (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)				
1497	Natural Abrasives, except sand: Establishments, total.....	20	0.3	2.2	0.2	0.5	1.4	4.3	2.8	5.7	1.4
	Establishments with an average of-										
	0 to 4 employees.....	6	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(Z)
	5 to 9 employees.....	5	(Z)	0.2	(Z)	0.1	0.1	0.4	0.2	0.5	0.1
	10 to 19 employees.....	4	0.3	2.0	0.1	0.5	1.2	3.7	2.7	5.1	1.3
	20 to 49 employees.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	100 to 249 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1498	Peat: Establishments, total.....	76	0.5	2.3	0.4	1.0	2.0	6.7	2.3	8.5	0.5
	Establishments with an average of-										
	0 to 4 employees.....	50	0.1	0.4	0.1	0.2	0.4	0.9	0.4	1.3	0.1
	5 to 9 employees.....	9	0.1	0.3	0.1	0.1	0.2	0.6	0.3	0.9	0.1
	10 to 19 employees.....	13	0.2	0.7	0.1	0.4	0.6	1.8	0.8	2.4	0.3
	20 to 49 employees.....	3	0.2	0.9	0.2	0.4	0.8	3.3	0.7	4.0	0.1
	50 to 99 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	27	(Z)	0.1	(Z)	0.1	0.1	0.3	0.2	0.4	(Z)
1499	Nonmetallic minerals, n.e.c.: Establishments, total.....	135	2.9	20.9	2.3	4.9	15.3	62.8	30.8	88.9	4.7
	Establishments with an average of-										
	0 to 4 employees.....	77	0.1	0.5	0.1	0.2	0.5	1.8	0.9	2.3	0.4
	5 to 9 employees.....	15	0.1	0.6	0.1	0.1	0.4	1.3	0.7	1.8	0.2
	10 to 19 employees.....	11	0.2	1.0	0.1	0.2	0.8	3.1	1.3	4.1	0.3
	20 to 49 employees.....	15	0.4	3.0	0.3	0.7	1.9	7.7	3.0	10.2	0.6
	50 to 99 employees.....	9	0.6	4.1	0.4	0.9	2.7	10.9	5.3	14.8	1.3
	100 to 249 employees.....	7	1.5	11.7	1.2	2.7	9.1	38.0	19.6	55.7	1.8
	500 to 999 employees.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Estabs. covered by admin. records ¹	52	0.1	0.3	0.1	0.1	0.3	0.9	0.5	1.2	0.1

Note: Detailed figures may not add to totals because of independent rounding or independent dropping of fractions of thousands (rather than rounding) in computer operations.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures above. - Represents zero. (X) Not applicable. (NA) Not available. (Z) Under 50 thousand (or under 50 employees). n.e.c. Not elsewhere classified.

¹Report forms were not mailed to companies that operated only one establishment and which Social Security payrolls indicated had fewer than 5 employees. Actual payrolls (and sales) for 1967 were obtained from administrative records of the Federal Government. The other statistics for these establishments were estimated from industry averages.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1967 and 1963

In millions of dollars. An establishment is assigned to an industry based on the shipments of products representing the largest amount considered as primary to an industry. Frequently the establishment shipments comprise mixtures of products assigned to an industry (primary products), those considered primary to other industries (secondary products of a given industry) and receipts

for activities such as contract work or resales. This product pattern for an industry is shown in columns A through E. The extent to which the given industry's primary products are shipped by establishments classified in and out of the given industry is summarized in columns F and H.

Code	Industry and census year	Value of shipments and receipts					Value of net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total produced in all industries	Produced in this industry	Produced in other industries
		A	B	C	D	E	F	G	H
1481	Nonmetallic minerals services.....1967..	15.3	(D)	(D)	(D)	(Z)	16.2	(D)	(D)
	.....1963..	13.2	12.8	-	0.5	(Z)	13.1	12.8	0.4
1492	Gypsum.....1967..	9.3	(D)	(D)	-	-	¹ 34.3	(D)	(D)
	.....1963..	10.2	9.6	(D)	(D)	-	¹ 38.3	9.6	¹ 28.7
1493	Mica.....1967..	6.7	(D)	-	-	(D)	7.0	6.3	² 0.7
	.....1963..	5.6	(D)	(D)	(Z)	(Z)	8.9	5.0	² 3.9
1494	Native asphalt and bitumens.....1967..	8.7	(D)	(D)	-	(D)	8.7	8.7	-
	.....1963..	8.5	(D)	(D)	-	(D)	8.2	(D)	(D)
1495	Pumice and pumicite.....1967..	2.8	(D)	(D)	-	(D)	3.3	(D)	(D)
	.....1963..	5.4	(D)	(D)	-	(Z)	5.5	(D)	(D)
1496	Talc, soapstone, and pyrophyllite.....1967..	21.3	20.4	(D)	(D)	(D)	20.3	(D)	(D)
	.....1963..	17.5	16.9	0.6	0.1	-	16.8	16.6	0.2
1497	Natural abrasives, except sand.....1967..	5.7	(D)	(D)	-	(D)	5.7	(D)	(D)
	.....1963..	5.0	5.0	-	-	(Z)	5.0	5.0	-
1498	Peat.....1967..	8.5	(D)	(D)	(D)	(D)	8.4	8.4	-
	.....1963..	7.4	(D)	-	(D)	-	7.4	(D)	(D)
1499	Nonmetallic minerals, n.e.c.....1967..	88.9	85.7	(D)	-	(D)	87.8	87.4	0.5
	.....1963..	43.0	43.0	(D)	(D)	(D)	44.2	(D)	(D)

Note: Detail may not add to the total due to independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Includes the estimated value of gypsum produced and used in the same establishment in the manufacture of calcined gypsum products. Excludes crushed, ground, screened, and dried gypsum produced in establishments which did not mine gypsum.

²Represents gross shipments from other industries, principally material processed in the manufacturing industries.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Service and geographic area	1967 ¹		1963 ¹			
		Crude ores produced	Receipts for services	Crude ores produced	Receipts for services		
		(1,000 short tons)	(million dollars)	(1,000 short tons)	(million dollars)		
1481- --	NONMETALLIC MINERALS SERVICES, TOTAL.....	(X)	16.2	(X)	13.1		
14818 01	Exploration work, including geophysical and other exploratory surveying...	(X)	(²)	(X)	(³)		
	Drilling:						
14818 03	Prospect and text drilling.....	(X)	1.7	(X)	1.1		
14818 05	Other drilling, including blasting.....	(X)	3.1	(X)	1.6		
14818 07	Sinking mine shafts and driving mine tunnels.....	(X)	0.8	(X)	(³)		
14818 02	Stripping overburden.....	(X)	3.1	(X)	1.5		
14818 04	Open pit or quarry mining minerals not for own account.....	4,460.6	4.3	(NA)	6.1		
14818 09	Other nonmetallic minerals (except fuel) services.....	(X)	² 3.3	(X)	² 2.9		
	Northeast and North Central Regions.....	(X)	5.2	(X)	2.8		
14818 03	Drilling.....	(X)	2.8	(X)	(NA)		
14818 05	Open pit or quarry mining minerals not for own account.....	(NA)	0.4	(NA)	(NA)		
	South Region.....	(X)	3.7	(X)	3.1		
14818 03	Drilling.....	(X)	1.0	(X)	(NA)		
14818 05	Open pit or quarry mining minerals not for own account.....	(D)	1.6	(NA)	(NA)		
	West Region.....	(X)	7.3	(X)	7.2		
14818 03	Drilling.....	(X)	0.9	(X)	1.6		
14818 07	Sinking mine shafts and driving mine tunnels.....	(X)	0.8	(NA)	(NA)		
14818 04	Open pit or quarry mining minerals not for own account.....	2,337.2	2.2	(NA)	(NA)		
	Product and geographic area	1967		1963			
		Production (1,000 short tons)	Shipments including interplant transfers		Production (1,000 short tons)	Shipments including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
1492- --	GYPSUM.....	(X)	(X)	⁴ 14.9	(X)	(X)	⁴ 14.4
	UNITED STATES						
14921 01	Crude gypsum, total.....	9,229.5	585.1	1.5	10,176.0	339.0	1.1
	Produced by mines classified in the Gypsum Industry.....	3,017.3	585.1	1.5	3,246.0	339.0	1.1
	Produced by mines included in establishments classified in manufacturing industries ⁵	6,212.2	-	-	6,930.0	-	-
14922 01	Crushed, ground, screened, or dried gypsum, total.....	(NA)	5,021.1	23.0	(NA)	4,736.0	19.8
32950 61	Produced at preparation plants included in establishments classified in the Gypsum Industry.....	2,409.6	2,430.8	7.7	2,837.0	2,812.0	8.5
	Produced at preparation plants included in establishments classified in manufacturing industries.....	(NA)	2,590.3	15.3	(NA)	1,924.0	11.2
	NORTHEAST AND NORTH CENTRAL						
14921 01	Crude gypsum, total.....	4,783.3	-	-	4,602.0	-	-
	Produced by mines classified in the Gypsum Industry.....	1,332.3	-	-	1,241.0	-	-
	Produced by mines included in establishments classified in manufacturing industries ⁵	3,451.0	-	-	3,361.0	-	-
14922 01	Crushed, ground, screened, or dried gypsum.....	(NA)	2,370.9	10.8	(NA)	2,054.0	9.2
32950 61	Middle Atlantic (New York); crude gypsum.....	568.6	-	-	615.0	-	-
14921 01	East North Central, crude gypsum.....	2,525.1	-	-	2,348.0	-	-
14921 01	West North Central, crude gypsum.....	1,689.6	-	-	1,639.0	-	-
	SOUTH						
14921 01	Crude gypsum, total.....	2,347.8	(D)	(D)	2,064.0	(D)	(D)
	Produced by mines classified in the Gypsum Industry.....	649.5	(D)	(D)	402.0	(D)	(D)
	Produced by mines included in establishments classified in manufacturing industries ⁵	1,698.3	-	-	1,662.0	-	-
14922 01	Crushed, ground, screened, or dried gypsum.....	(NA)	1,190.3	6.4	(NA)	1,032.0	5.2
32950 61	Oklahoma:						
14921 01	Crude gypsum.....	810.3	(D)	(D)	557.0	(D)	(D)
14922 01	Crushed, ground, screened, or dried gypsum.....	(NA)	207.7	0.9	(NA)	(NA)	(NA)
14921 01	Texas, crude gypsum.....	903.7	-	-	1,004.0	-	-

See footnotes at end of table.

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	1967			1963		
		Production (1,000 short tons)	Shipments including interplant transfers		Production (1,000 short tons)	Shipments including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
1492- --	GYPSUM--Continued						
	WEST						
14921 01	Crude gypsum, total.....	2,098.4	(D)	(D)	3,510.0	(D)	(D)
	Produced by mines classified in the Gypsum Industry.....	1,035.5	(D)	(D)	1,603.0	(D)	(D)
	Produced by mines included in establishments classified in manufacturing industries ⁵	1,062.9	-	-	1,907.0	-	-
14922 01 32950 61	Crushed, ground, screened, or dried gypsum.....	(NA)	1,459.9	5.8	(NA)	1,650.0	5.4
	Mountain:						
14921 01	Crude gypsum.....	926.3	(D)	(D)	(NA)	(NA)	(NA)
14922 01 32950 61	Crushed, ground, screened, or dried gypsum.....	(NA)	566.8	2.6	(NA)	(NA)	(NA)
	Nevada:						
14921 01	Crude gypsum.....	432.7	-	-	854.0	-	-
14922 01	Crushed, ground, screened, or dried gypsum.....	(NA)	245.9	0.9	(NA)	(NA)	(NA)
	Pacific:						
14921 01	Crude gypsum.....	1,172.1	(D)	(D)	(NA)	(NA)	(NA)
14922 01 32950 61	Crushed, ground, screened, or dried gypsum.....	(NA)	893.2	3.2	(NA)	(NA)	(NA)
1493- --	MICA, TOTAL.....	(X)	(X)	7.0	(X)	(X)	⁶ 5.6
	UNITED STATES						
14931 02	Hand-cobbed and sheet mica.....	⁷ (NA)	⁷ (NA)	⁷ (NA)	⁸ 108.0	⁸ 108.0	(Z)
14931 05	Scrap (or flake) mica.....	156.0	⁹ 35.0	⁹ 1.1	113.3	⁹ 42.4	⁹ 1.3
14932 01	Ground mica, total.....	(NA)	(NA)	(NA)	(NA)	124.1	7.5
	Mined and processed at establishments classified in the mineral industries.....	119.6	119.7	5.9	87.1	86.6	4.3
	Processed at establishments classified in the manufacturing industries.....	(NA)	(NA)	(NA)	(NA)	37.5	3.2
	NORTH CAROLINA						
14931 05	Scrap (or flake) mica.....	71.2	⁹ 26.1	⁹ 0.8	58.1	⁹ 21.0	⁹ 0.6
14932 01	Ground mica mined and processed at establishments classified in the mineral industries.....	44.8	45.0	2.2	(NA)	¹⁰ 64.2	¹⁰ 3.9
1494- --	NATIVE ASPHALT AND BITUMENS, TOTAL.....	(X)	(X)	8.7	(X)	(X)	8.8
14940 01	Bituminous limestone.....	1,698.0	1,698.0	8.7	1314.0	1,317.0	8.8
14940 03	Bituminous sandstone.....	(D)	(D)		(D)	(D)	
14940 05	Gilsonite.....						
14950 00	PUMICE AND PUMICITE ¹¹	1,329.3	1,322.1	3.3	2,308.0	2,294.0	5.5
	Mountain.....	419.7	420.0	0.9	1,305.0	1,329.0	¹² 2.6
	New Mexico.....	171.2	171.2	0.5	306.0	306.0	0.9
	Pacific.....	869.9	862.4	2.4	981.0	943.0	2.7
	Oregon.....	323.5	323.2	0.7	362.0	362.0	¹² 0.6
	California.....	401.6	394.3	1.3	286.0	266.0	1.5
1496- --	TALC, SOAPSTONE, AND PYROPHYLLITE, TOTAL.....	(X)	(X)	¹³ 20.3	(X)	(X)	¹³ ¹⁴ 16.8
	UNITED STATES						
14961 01	Crude production and net shipments.....	980.9	¹³ 293.9	¹³ 3.2	873.0	¹³ 219.0	¹³ 1.9
	Prepared (crushed, ground, or sawed, including flotation concentrates), total.....	(NA)	(NA)	(NA)	(NA)	795.0	18.7
14962 01	Ore mined and processed at establishments classified in the mineral industries.....	611.7	604.6	17.0	601.0	601.0	14.9
	Ore processed at establishments classified in the manufacturing industries.....	(NA)	(NA)	(NA)	(NA)	194.0	3.8

TABLE 6. Primary Products of the Industry, by Geographic Areas: 1967 and 1963—Continued

(Includes quantity and value of the products reported not only by establishments classified in this industry, but also by establishments classified in other industries, and shipping these products as "secondary" products. See appendix, Explanation of Terms, "Individual Products")

Product code	Product and geographic area	1967			1963		
		Production (1,000 short tons)	Shipments, including interplant transfers		Production (1,000 short tons)	Shipments, including interplant transfers	
			Quantity (1,000 short tons)	Value (million dollars)		Quantity (1,000 short tons)	Value (million dollars)
1496- --	TALC, SOAPSTONE, AND PYROPHYLLITE--Continued						
	NORTHEAST						
14961 01	Crude.....	421.6	} 348.8	8.5	{ 380.0	¹³ 8.0	(Z)
14962 01	Prepared ¹⁵	(D)				323.0	7.9
	SOUTH						
14961 01	Crude.....	320.6	¹³ 67.7	¹³ 0.3	278.0	¹³ 85.0	¹³ 0.4
14962 01	Prepared ¹⁵	248.2	242.9	7.4	(NA)	256.0	6.3
	North Carolina:						
14961 01	Crude.....	113.5	(D)	(D)	107.0	43.0	0.2
14962 01	Prepared ¹⁵	93.9	93.1	2.0	63.0	63.0	1.6
	Texas:						
14961 01	Crude.....	92.5	(D)	(D)	(NA)	(NA)	(NA)
	WEST						
14961 01	Crude.....	238.7	} 239.1	4.0	{ 215.0	¹³ 130.0	¹³ 1.5
14962 01	Prepared ¹⁵	(D)				216.0	4.6
	California:						
14961 01	Crude.....	156.4	(D)	(D)	146.0	¹³ 92.0	¹³ 1.2
14962 01	Prepared ¹⁵	(NA)	(D)	(D)	(NA)	130.0	3.1
14970 00	NATURAL ABRASIVES, EXCEPT SAND.....	104.8	103.2	5.7	84.0	83.0	5.0
	Middle Atlantic Division and North Central Region.....	91.5	90.0	5.0	78.0	78.0	4.6
14980 00	PEAT, TOTAL.....	587.2	587.6	8.4	566.0	549.0	7.4
	Region:						
	Northeast.....	123.0	120.8	1.2	84.0	81.0	0.7
	North Central.....	325.9	328.5	5.7	352.0	337.0	5.5
	South and West.....	138.3	138.3	1.5	130.0	128.0	1.1
1499- --	NONMETALLIC MINERALS, N.E.C., TOTAL.....	(X)	(X)	¹³ 87.8	(X)	(X)	¹³ 44.2
14992 01	Asbestos, crude and prepared.....	119.5	122.2	11.2	68.0	64.0	5.5
14991 03	Diatomite, crude and prepared.....	706.1	618.3	37.3	554.0	554.0	28.0
14992 03							
14992 05	Perlite ¹⁶	538.1	414.9	4.8	385.0	343.0	4.7
14992 11	Shell, crushed or broken ¹⁷	13,716.9	13,837.8	24.5	(NA)	(NA)	(NA)
14991 98	Other nonmetallic minerals ¹⁸	(NA)	(NA)	¹³ 10.1	412.0	¹³ 391.0	¹³ 6.1
14992 98							

Note: Detail may not add to the total because of independent rounding.

Standard notes: - Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹Excludes receipts for contract services performed by mine operators classified in nonmetallic minerals (except fuels) mining industries. In 1963, the value of receipts for contract services performed by these establishments was \$12.3 million.²Exploration work, including geophysical and other exploratory surveying, is included with other nonmetallic minerals (except fuels) services.³Exploration work, including geophysical and other exploratory surveying, and sinking mine shafts and driving, mine tunnels, are included with other nonmetallic minerals (except fuels) services.⁴Excludes product code 32950 61 which is included in the detail below.⁵Includes gypsum produced and used in the same establishment in manufacturing gypsum products.⁶Excludes data for ground mica produced at establishments classified in manufacturing industries and shown separately below.⁷In 1967, no establishment reported any production or shipments of either hand-cobbed mica or sheet mica. The U.S. Bureau of Mines, Department of Interior, reported 20,000 lbs. of sheet mica sold or used by producers in 1967.⁸Quantity of production and shipments is in thousands of pounds.⁹Represents net shipments, that is, gross shipments less minerals received from other establishments for preparation.¹⁰Data includes ground mica processed at establishments classified in the manufacturing industries.¹¹Excludes federal, State, and local government operations.¹²Represents value of shipments of establishments in the Pumice and Pumicite Industry.¹³Represents net shipments; that is, gross shipments less minerals received from other establishments for preparation.¹⁴Excludes data for prepared talc, soapstone, and pyrophyllite produced at establishments classified in manufacturing industries and shown separately below.¹⁵Figures for 1967 represent ore mined and processed at establishments classified in the minerals industry only, whereas figures for 1963 also include ore processed at establishments classified in the manufacturing industries.¹⁶Represents crude production and crude and prepared shipments. Includes simple preparation methods such as drying and crushing, and expansion if performed in conjunction with mining.¹⁷Excludes production and shipments of shell produced and used by establishments primarily classified in construction or in manufacturing industries such as those producing cement or concrete products.¹⁸Represents such minerals as vermiculite, graphite, gemstones, staurolite, and greensand.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1481.--NONMETALLIC MINERALS SERVICES			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	5.5	(X)	4.3
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	4.8	(X)	3.7
353011	Purchased machinery installed.....		(X)	1.8	(X)	1.1
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	}	(X)	3.0	(X)	2.7
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....					
974000	Undistributed supplies ¹					
	Fuels used, total.....		(X)	0.7	(X)	0.6
291141	Fuel oil.....	1,000 barrels...	49.6	0.2	22.0	}
291151	Gas.....	Million cu. ft..	(NA)	(²)	280.0	
131300	Gasoline.....	1,000 gallons...	632.0	0.2	778.0	
960018	Other fuels.....		(X)	² 0.3	(X)	
977000	Undistributed fuels ¹					
	<u>Type of Operation</u> (not applicable)					
			INDUSTRY.--1492 GYPSUM			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.2	(X)	3.0
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.0	(X)	2.7
147091	Minerals for preparation: Mined and prepared at the same establishment in the Gypsum Industry.....	1,000 short tons	2 419.2	(X)	2 838.0	(X)
353011	Purchased machinery installed.....		(X)	0.4	(X)	0.9
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	}	(X)	1.6	(X)	1.9
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....					
974000	Undistributed supplies ¹					
	Fuels used, total.....		(X)	0.2	(X)	0.3
291141	Fuel oil.....	1,000 barrels...	23.0	0.1	37.0	}
291151	Gas.....	Million cu. ft..	(X)	0.1	60.0	
131300	Gasoline.....	1,000 gallons...			130.0	
291111	Other fuels.....				(X)	
960018	Undistributed fuels ¹				(X)	
977000						
	<u>Type of Operation</u>					
	Producing open-pit mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	1.5	(X)	2.4
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.4	(X)	2.1
	Fuels used, total.....		(X)	0.2	(X)	0.3

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1493.--MICA			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	1.4	(X)	³ 2.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.2	(X)	³ 1.9
147091	Minerals mined and received for preparation:					
	Mined and prepared at same establishment.....	1,000 short tons	119.3	(X)	86.6	(X)
	Received for preparation.....		(X)	(⁴)	(X)	³ 0.3
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.5
	Supplies used:					
331201	Steel mill shapes and forms.....	}	(X)	⁴ 0.8	(X)	1.1
970099	All other supplies.....					
974000	Undistributed supplies ¹					
	Fuels used, total.....		(X)	0.2	(X)	0.2
121005	Coal.....	1,000 short tons	(NA)	(⁵)	2.0	}
291141	Fuel oil.....	1,000 barrels...	18.1	0.1	(NA)	
291151	Gas.....	Million cu. ft..	(NA)	⁵ 0.1	129.0	
131300	Gasoline.....	1,000 gallons...	(NA)		58.0	
291111	Other fuels.....		(X)		(X)	
960018	Undistributed fuels ¹		(X)		(X)	
977000						
	<u>Type of Operation</u>					
	Producing open pit mines with preparation plants:					
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.4
			INDUSTRY 1494.--NATIVE ASPHALT AND BITUMENS			
	<u>Geographic Area</u>					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.4	(X)	1.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.3	(X)	1.7
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.6
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	1,000 lbs.....	687.5	0.2	(X)	1.1
289212	Ammonium nitrate.....	do.....	(D)			
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....	}	(X)	1.8	(X)	
970099	All other supplies.....					
974000	Undistributed supplies ¹					
	Fuels used, total.....		(X)	0.2	(X)	0.2
291141	Distillate fuel oil.....	1,000 barrels...	21.3	0.1	22.0	}
131300	Gas.....		(NA)	0.1	-	
291111	Gasoline.....	1,000 gallons...	(NA)		181.0	
960018	Other fuels.....		(X)		(X)	
977000	Undistributed fuels ¹		(X)		(X)	
	<u>Type of Operation</u>					
	(Withheld to avoid disclosing figures of individual companies.)					

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963		
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)	
			INDUSTRY 1495.--PUMICE AND PUMICITE				
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	0.6	(X)	1.5	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	0.5	(X)	1.3	
353011	Purchased machinery installed.....		(X)	0.1	(X)	0.5	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	}	(X)	0.4	(X)	0.8	
289212	Ammonium nitrate.....						
331201	Steel mill shapes and forms.....						
970099	All other supplies.....						
974000	Undistributed supplies ¹						
	Fuels used, total.....		(X)	0.1	(X)	0.2	
291141	Distillate fuel oil.....	1,000 barrels...	8.7	}	{	0.2	
291111	Gasoline.....	1,000 gallons...	(D)				2.0
960018	Other fuels.....		(X)				120.0
977000	Undistributed fuels ¹		(X)				(X)
	<u>Type of Operation</u>						
	(Withheld to avoid disclosing figures of individual companies.)						
			INDUSTRY 1496.--TALC, SOAPSTONE, AND PYROPHYLLITE				
	<u>Geographic Area</u>						
	UNITED STATES						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	5.2	(X)	4.0	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	4.8	(X)	3.7	
147091	Minerals mined and received for preparation:						
	Mined and prepared at same establishment.....	1,000 short tons.....	686.8	(NA)	594.0	(NA)	
	Received for preparation.....		(D)	(⁴)	(NA)	0.3	
353011	Purchased machinery installed.....		(X)	1.2	(X)	0.5	
	Supplies used:						
289211	Explosive materials, except ammonium nitrate.....	1,000 pounds....	592.8	0.1	}	(X)	
289212	Ammonium nitrate.....		(X)	3.5			3.0
289214	Blasting accessories.....						
331201	Steel mill shapes and forms.....						
970099	All other supplies.....						
974000	Undistributed supplies ¹						
	Fuels used, total.....		(X)	0.4	(X)	0.3	
121005	Coal.....		(D)	(⁶)	(X)	}	
291141	Fuel oil.....	1,000 barrels...	38.8	0.2	36.0		
291151	Gas.....	Million cu. ft..	(D)	(⁶)	41.0		
131300	Gasoline.....	1,000 gallons...	410.0	0.1	171.0		
960018	Other fuels.....		(X)	0.1	(X)		
977000	Undistributed fuels ¹						
	NORTHEAST REGION						
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	1.9	(X)	1.8	
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.7	(X)	1.5	
147091	Minerals mined and received for preparation:						
	Mined and prepared at same establishment.....	1,000 short tons.....	358.5	(NA)	(NA)	(NA)	
353011	Purchased machinery installed.....		(X)	0.3	(X)	0.2	
	Fuels used.....		(X)	0.2	(X)	0.1	

See footnotes at end of table.²

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1496.--TALC, SOAPSTONE, AND PYROPHYLLITE--CON.			
	SOUTH REGION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	1.8	(X)	1.0
	Selected supplies, minerals received for preparation, and purchased machinery installed.....		(X)	1.6	(X)	0.9
	Fuels used.....		(X)	0.2	(X)	0.1
	Type of Operation					
	Underground mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.0	(X)	1.3
353011	Purchased machinery installed.....		(X)	0.7	(X)	0.2
			INDUSTRY 1497.--NATURAL ABRASIVES, EXCEPT SAND			
	Geographic Area					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.6	(X)	1.1
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.4	(X)	1.0
353011	Purchased machinery installed.....				(X)	0.1
28921-	Supplies used:					
331201	Explosives.....		(X)	2.4		
970099	Steel mill shapes and forms.....				(X)	0.9
974000	All other supplies.....					
	Undistributed supplies ¹					
	Fuels used, total.....		(X)	0.2	(X)	0.2
291141	Distillate fuel oil.....	1,000 barrels...			24.0	
131300	Gas.....	Million cu. ft..			49.0	
291111	Gasoline.....	1,000 gallons...	(X)	0.2	39.0	0.2
960018	Other fuels.....				(X)	
977000	Undistributed fuels ¹				(X)	
	Type of Operation					
	(Withheld to avoid disclosing figures of individual companies.)					
			INDUSTRY 1498.--PEAT			
	Geographic Area					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	2.0	(X)	2.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	1.8	(X)	1.7
353011	Purchased machinery installed.....				(X)	0.7
974000	Undistributed supplies ¹		(X)	1.8	(X)	1.0
	Fuels used, total.....		(X)	0.2	(X)	0.4
291141	Distillate fuel oil.....	1,000 barrels...	2.1		1.0	
131300	Gas.....	Million cu. ft..	(D)		8.0	
291111	Gasoline.....	1,000 gallons...		0.2	170.0	0.4
960018	Other fuels.....		(X)		(X)	
977000	Undistributed fuels ¹				(X)	
	Type of Operation					
	(Withheld to avoid disclosing figures of individual companies.)					

See footnotes at end of table.

TABLE 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery Installed, and Fuel Used, by Geographic Areas and Type of Operation: 1967 and 1963—Continued

(See appendix, Explanation of Terms)

Code	Geographic area and type of operation	Unit of measure	1967		1963	
			Quantity	Cost (million dollars)	Quantity	Cost (million dollars)
			INDUSTRY 1499.--NONMETALLIC MINERALS N.E.C.			
	Geographic Area					
	UNITED STATES					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	21.7	(X)	³ 11.9
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	18.4	(X)	³ 10.2
147091	Minerals received for preparation:.....		(X)	(⁴)	(NA)	³ 0.2
353011	Purchased machinery installed.....		(X)	4.7	(X)	3.7
	Supplies used:					
289211	Explosive materials, except ammonium nitrate.....	}	(X)	⁴ 13.7	(X)	6.3
289212	Ammonium nitrate.....					
289214	Blasting accessories.....					
331201	Steel mill shapes and forms.....					
970099	All other supplies.....					
974000	Undistributed supplies ¹					
	Fuels used, total.....		(X)	3.3	(X)	1.8
	Fuel oil:					
291141	Distillate.....	1,000 barrels....	211.1	0.9	69.0	}
291151	Residual.....	do.....	105.0	0.4	123.0	
131300	Gas.....	Million cu. ft...	2,848.3	1.1	1,973.0	
291111	Gasoline.....	1,000 gallons....	390.0	0.1	577.0	
960018	Other fuels.....		(X)	(Z)	(X)	
977000	Undistributed fuels ¹		(X)	0.8	(X)	
	MOUNTAIN DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	3.4	(X)	⁴ 3.2
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	2.8	(X)	⁴ 2.7
353011	Purchased machinery installed.....		(X)	1.3	(X)	0.9
	Fuels used.....		(X)	0.6	(X)	0.5
291141	Fuel oil.....	1,000 barrels....	48.4	0.2	105.0	(NA)
291151						
	PACIFIC DIVISION					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	9.1	(X)	⁴ 6.8
	Selected supplies, minerals received for preparation, and purchased machinery installed, total.....		(X)	8.0	(X)	⁴ 5.8
353011	Purchased machinery installed.....		(X)	2.1	(X)	2.4
	Fuels used.....		(X)	1.1	(X)	1.0
	Type of Operation					
	Producing open-pit mines with preparation plants:					
	Selected supplies, minerals received for preparation, purchased machinery installed, and fuels used, total.....		(X)	14.5	(X)	11.5
	Selected supplies, minerals received for preparation, and purchased machinery installed.....		(X)	12.5	(X)	9.8
353011	Purchased machinery installed.....		(X)	3.5	(X)	3.5
	Fuels used.....		(X)	2.0	(X)	1.7
291141	Fuel oil.....	1,000 barrels....	119.5	0.5	191.0	(NA)
291151						

Note: Detail may not add to totals due to independent rounding.

Standard notes: (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(Z) Less than \$50 thousand. n.e.c. Not elsewhere classified.

¹This item represents the total cost of supplies or fuels used for establishments that did not report detailed data. For 1967, this also includes estimates for establishments that were not mailed report forms.²The cost of gas is included with the costs of other fuels and undistributed fuels.³Includes purchases for resale.⁴The cost of minerals received for preparation is included with the costs of supplies used and undistributed supplies.⁵The cost of coal is included with the costs of gas, gasoline, other fuels, and undistributed fuels.⁶The costs of coal and gas are included with the costs of other fuels and undistributed fuels.

Appendix A

EXPLANATION OF TERMS

Employment and Related Items—The standard report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year; other employees as of the 12th of March. The categories defined on the questionnaire are as follows:

All employees.—The category "all employees" comprises all full-time and part-time employees on the payrolls of mining establishments who worked or received pay for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees of miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers—This category includes employees (up through the working foreman level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and watchmen services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working foreman level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical, and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and

who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

Central administrative office and auxiliary unit employees—Employees at an office located at or near the mining establishment are usually included in the mine report. Employment during the payroll period which included March 12 at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment were classified on the basis of the industry or principal industry served.

Mining Employees: Average Employment—The 1967 census report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (mid-March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for "production, development, and exploration workers" plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates closely, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods. In the employment data shown in this report, the 4-month average is shown for all industries.

Mining Employees: Payrolls—This total includes the gross earnings paid in the calendar year 1967 to all employees on the payroll of reported establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation. It excludes payments to the proprietor or partners, if an unincorporated concern. Excluded are payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages.

The 1967 census definition of payrolls, identical to that recommended to all Federal statistical agencies by the Bureau of the Budget, is the same as the 1958 and 1963 census definition. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workmen's compensation.

As in the case of employment and establishment figures, the annual payrolls of separate central administrative offices and auxiliary units of multiestablishment companies are included in the totals for individual industries and in State totals.

Production, Development, and Exploration Workers Man-Hours—This total consists of all man-hours of production, development, and exploration workers as defined above which were worked both on active days on which there was production or development work, and on inactive days when only watchmen, inspectors, repairmen, and other maintenance men were on duty. It represents all man-hours worked or paid for at the establishment including actual overtime hours (not straight-time equivalent hours). It *excludes* hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

Cost of Supplies, Etc., and Purchased Machinery—A summary inquiry on the 1967 census report forms requested information on the cost of supplies, purchased machinery, minerals received for preparation, the cost of products purchased for resale, purchased fuels, and electric energy actually used during the year by each establishment, withdrawn from inventories, or received from other establishments of the company; and the cost of contract work. "Cost" refers to direct charges actually paid or payable for items used during the year, after discounts, and including freight charges and other direct charges incurred by the establishment in acquiring these materials.

To arrive at the industry total "cost of supplies, etc.," separate figures were obtained for (a) the total delivered cost of all supplies used, minerals received for preparation, and purchased machinery installed; (b) the amount paid for electric energy purchased; (c) the amount paid for all purchased fuels used for heat, power, or the generation of electricity; (d) the cost of work done by others on a contract, fee, or other basis for the account of the establishments (contract work); and (e) the cost of products bought and resold without further processing. The total excludes the cost of other services used, such as advertising, insurance, telephone, etc., and research and consulting services of other establishments. It also excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc. It includes supplies, machinery, and equipment used in development and exploration of mineral properties and in capitalized repairs.

In the case of the cost reported for supplies, minerals for preparation, and purchased machinery received from other establishments of the same company or from a central supplies depot (whether at the same or different physical location), the respondent was asked to value the items at their full economic value as produced, plus freight and other direct handling charges. The respondent was asked to check, where possible, that such reported costs equal the value of shipments reported for the company's establishment producing and transferring the product, plus freight and other direct charges.

It should be noted that the cost of purchased fuel used under "c" above does not include fuels received for preparation, such as coal received for cleaning. Such costs were included in category "a" above.

Individual Supplies Used—In addition to the total cost of supplies, etc., and purchased machinery which every establishment was required to report, information was also collected on the consumption of major supplies used in mining. These supplies inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and

development of a particular industry and for which cost information was available from the firms' records. Information regarding the specific supplies consumed is shown in table 7.

Minerals for Preparation—On report forms for almost all mineral industries, except the petroleum and natural gas and contract services industries, a uniform inquiry was included on minerals prepared or treated at the reported establishments. Separated quantity figures were obtained on minerals prepared from three sources: (1) Crude minerals mined at the establishment (quantity); (2) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (3) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

Establishments consuming less than a specified amount (usually \$5,000) were not requested to report the cost of a supply separately. Also, the cost of supplies for small establishments for which administrative records were used were imputed as "not specified by kind." (See text for importance of administrative records in the industry.)

Energy Used—The 1967 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1963, 1958, 1954, 1939, 1929, and 1919 censuses. For most industries, separate quantity and cost figures were provided on purchased coal, fuel oil, gas, gasoline, and electric energy, and a cost figure was obtained for other fuels.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and consumed at the same establishment. In the minerals census, such data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat, and for electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use), and the quantity of electric energy sold. The difference between the sum of the first two quantity figures and the last figure represents approximate electric energy generated and used.

Capital Expenditures—In the 1967 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that were chargeable to fixed-assets accounts of the mining establishments and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1967 were to be determined as "additions completed during the year plus work in progress at the end of the year minus work in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes as well as those for additions to capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation (or treatment) plant construction and other construction, (c) new machinery and new equipment (including capitalized repairs and improvements), and (d) used plant and used equipment acquired from others.

Value of Shipments and Receipts and Net Shipments—The amounts shown as value of shipments for each industry (tables 1 to 5), and for individual products or classes of products (table 6), are the net selling values, f.o.b. mine or plant, after discounts and allowances, and excluding freight charges.

“Shipments” include all products physically shipped from the establishment during 1967 including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1967. Prepared material or concentrates include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to report the estimated value, not merely the cost of producing the items.

Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; that is, to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

The figures for “value of shipments and receipts” of an industry include, for all establishments classified in the industry, (a) the value of all “primary” products of the industry, (b) the value of “secondary” products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total to avoid duplication with the value of custom milled ores included in “a” or “b.”

For industry and industry-group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation or resale. In general, where this duplication is significant, figures are shown for both “gross” and “net” shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation and the value of resales from the gross shipments.

Comparable figures for gross and net shipments are available for 1963, 1958, and 1954. For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications because of mining and later milling of the same material.

Individual Products—In the 1967 Census of Mineral Industries, information was obtained on about 225 individual mineral product items. Product detail provides broad-level data on crude and prepared minerals. These figures serve as tie-lines to the correspondingly more detailed product statistics obtained

annually by the Bureau of Mines. The extent of comparability of product statistics of the two agencies is indicated in a table shown at the end of the specialized text for each industry report.

The list of products for which separate information was collected was prepared after extensive consultation with industry members and representatives of the Bureau of Mines and other government agencies.

In general, figures were collected on both quantity and value of shipments. The shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses was collected. Typically, production was also collected for products for which there usually are significant differences between total production and total shipments as a result of stock changes.

For contract service industries, the amount received or due for services performed during 1967 was collected as a measure of output. For mine operators who also perform contract services, the amount received for such services was added to the total value of products shipped to determine total “value of shipments and receipts” for each establishment.

Table 6 of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. In some cases, it provides separate totals for the amount of each product made by the primary industry and the amount made by other industries. Where available, production statistics are included in this table.

Value Added in Mining—Since the 1954 census, this measure has been computed by subtracting the cost of supplies, etc., and purchased machinery from the value of shipments and receipts plus capital expenditures.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure, not only of value added in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

“Value of shipments” used in this calculation includes the shipments of all products of the mining establishment, together with receipts for contract work done for others.

“Capital expenditures” used includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The

"costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years, comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of net production and receipts, the cost of supplies, purchased fuels and electric energy, and contract work.

Value added in mining should not be confused with "national income originating in mining," as presented in the national income by industrial origin estimates compiled by the Office of Business Economics (OBE), U.S. Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production and is, therefore, a more "net" concept of value added than that used in the census of mineral industries. "Income originating" excludes, in addition to cost of materials, such other costs as depreciation charges; State and local taxes (other than corporate income taxes); allowance for bad debts; and purchases of services from other industries not included in the census contract costs, such as services of development and

research firms, services of engineering and management consultants, advertising, telephone and telegraph expense, insurance, royalties, patent fees, etc.

In part, the national income originating estimates are prepared from company rather than establishment data. This method results in the inclusion of some part of the net value added by manufacturing establishments of companies classified as being primarily mining; and conversely, in the exclusion of some part of the net value added in mining establishments of companies classified as primarily manufacturing. For mining as a whole, the net effect decreases income originating.

Fuels and Electric Energy—In table 7, information on the use of fuels and electric energy is provided for the year 1967.

Separate figures are shown for coal, fuel oil, gas, gasoline, and other fuels used for power and heat; purchased electric energy generated by mining establishments; and energy generated less sold. Figures are also shown for the quantity of coal, crude petroleum, and gas produced and used at the same establishment for power and heat.



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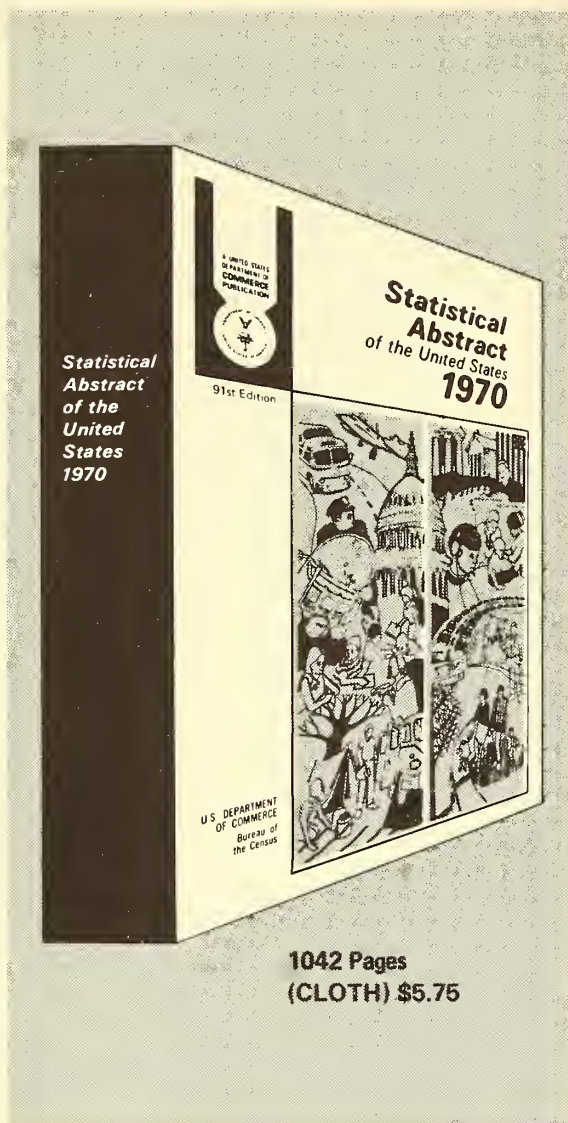
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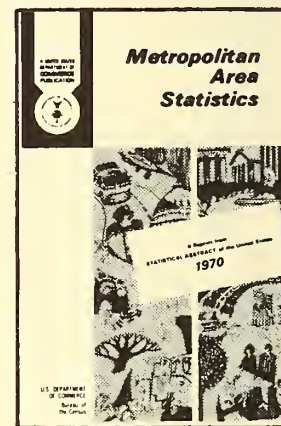
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